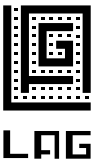

Crossing Borders

Festival of Art and Independent Games

Co-funded by the
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LAG

Crossing Borders

Festival of Art and Independent Games

edited by
Małgorzata Łuszczak

Content partner:

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Cieszyn 2019

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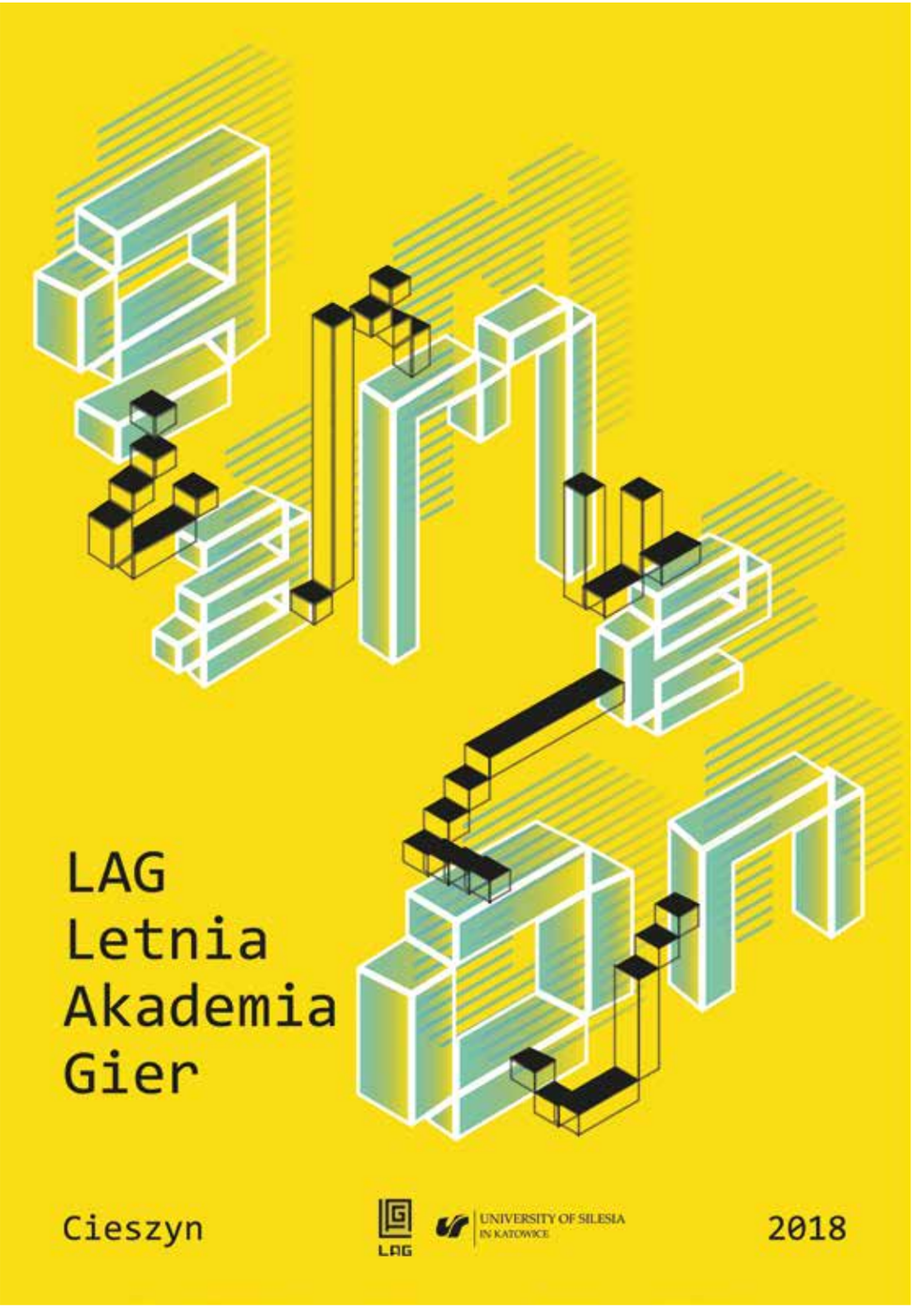

LAG Festival 2018 – *FIRST PRIZE of the Poster Competition*
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Małgorzata Łuszczak
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Graphic Artist, Ph.D. in Humanities, Art Professor.
Her intermedia art works include: drawing, graphics, animation, open-air activities and digital media. Mixes traditional media with digital print and Augmented Reality (AR).

Affiliated with the University of Silesia for 40 years. Since 2012 Director of the New Media Department, Dean of the Faculty of Art in Cieszyn and member of the University of Silesia Senate in Katowice. Runs the Drawing lab, Concept Art lab and the Diploma courses at the Faculty of Games and Virtual Space Design.

Over the period 2007 – 2018 Łuszczak worked as an academic teacher at the University of Ss. Cyril and Methodius in Trnava, Slovakia, at the Faculty of Mass Media Communication. She delivered lectures on corporate identity at doctoral studies.

Between 1995 and 1999 Łuszczak worked as an Art Design Director for TopWare, a German company producing video games (e.g. Jack Orlando).
She is a laureate of numerous awards and distinctions for her artistic activities and organizational work, innovative didactics, international cooperation and popularization of art and culture in Silesia.

For more information visit **www.malgorzataluszczak.com**

FESTIVAL

Małgorzata Łuszczak
University of Silesia in Katowice, Director of the Lag Festival, Poland

Crossing Borders

The main goal of **the Festival of Art and Independent Games** was to foster co-operation between several European digital culture sectors and increase their opportunities for taking part in international actions which promote the creation of independent artistic games.

The LAG Festival of Art and Independent Games was organized as part of a project co-financed by Creative Europe Programme run by the European Union and was also financially supported by the Town of Cieszyn. The leader of the project was the University of Silesia, that is the Faculty of Fine Arts and Music in Cieszyn, while the partners were the University of Ostrava and the University of Ss. Cyril and Methodius in Trnava.

The festival was attended by high-school and university students, game creators, artists, teachers, and representatives of business and cultural institutions, not only from Poland, the Czech Republic and Slovakia, but also from over 20 other countries including: Germany, Belgium, Austria, Spain, Cyprus, Japan, the USA, Mexico, China and France.

Our common mission was to strengthen the influence of independent high-quality artistic games on the entire video game industry. We wanted to achieve this goal by building ties between the universities which offer fields of study related to the creative industry with particular focus on the design and marketing of digital games and also connections between creative communities and the creative industry, which could be formed thanks to the joint development of independent artistic games aimed at a wider public. Since this branch of the creative sector is rapidly developing, it is necessary to educate specialists in independent artistic games, to raise their awareness of the value of such video games and the role they should play.

We worked on strengthening the ties between academic centres and student associations, with the help of independent creators of artistic games. The Festival participants established cooperation and built a network of contacts, which enabled the formation of international creative teams that boost career development and increase job perspectives. Another important goal

was to promote independent games. We believe that the festival has increased the public awareness of the existence of artistic games, which will be reflected by increased expectations regarding the artistic quality of the commercially available video games.

The project attracted over 200 high school students, 400 university students and 2000 representatives of the local community. The participants interested in the creative sector of video games had the opportunity to attend a number of events such as concerts, presentations, conferences and workshops. The festival was accompanied by many other events, including: two editions of the international poster competition, a concept art exhibition, a diploma projects exhibition, movie screenings and artistic projects in urban spaces, such as car painting or sculpting in the open air.

The Festival of Art and Independent Games was held in the period from October 2015 to September 2019 in the Czech Republic, Poland and Slovakia. Each year, the project involved such cyclic events as: LAG Arena, LAG Game Jam, LAG Edu, LAG Music and LAG Festival, as well as a number of accompanying events, for example the international poster competition inspired by games or a board game competition.

LAG is an acronym for Letnia Akademia Gier (Summer Game Academy). It is an event which has accompanied the Game and Virtual Space Design study programme ever since its establishment. The first workshop of this kind took place in 2012. The idea behind it was to organize an overview of the ended academic year, similar to events organized by all educational institutions which offer artistic education. After the very first meeting, we realized that even if innovative education does not require completely new forms of presentation, it definitely requires a modified form of presentation which would correspond to the programme assumptions of this field of study. video game is a complex product, in which the visual designer or the sound designer is indispensable yet still just one of many contributors. Therefore, the workshops were aimed at students dealing with the visual aspect of games, sound, narration and programming. Since 2015, LAG has been a part of the Festival of Art and Independent Games and it has become a regular event on the cultural calendar of the Department of New Media at the Faculty of Fine Arts and Music in Cieszyn. It is an artistic event which promotes interdisciplinary activities and digital culture. It is not only a form of entertainment, but also an important teaching tool.

The publication entitled “Crossing Borders” which we wish to present to you offers a summary of the project discussing subsequent editions of LAG in individual chapters. This modest size publication offers only a glimpse of the vast amount of material we have gathered. For more information please visit our websites: **lagfestival.us.edu.pl**

LAG Festival 2018 – *DISTINCTION of the Poster Competition*
Damian Klaczkiewicz, PL

PARTNERS

UNIVERSITY OF SILESIA IN KATOWICE

The University of Silesia in Katowice is one of the largest and most dynamically developing public universities in Poland. The university offers a variety of new solutions in education and a stimulating learning and research environment. The academic workers, students and alumni work individually as well as in teams, on the subjects which are important from the perspective of the region, country and globally. They examine the life on land and under water, analyse climate change, seek solutions to the problems of poverty, famine and social inequalities. They participate in building the cities and shape the societies of tomorrow. Their research results contribute to improving the living conditions and the quality of life. They develop effective medicines and innovative materials, they study the country's and world's cultural heritage, explore new technologies and research the Macro - and Microcosm. They create art and participate in a number of artistic events. They share their knowledge, popularize science, inspire and ignite the curiosity in education in persons of all ages. By expanding the boundaries and horizons of human knowledge they change the surrounding reality.

A high level of the scientific research, variety of initiatives and the modern infrastructure result in high quality education. The university constantly develops its didactic offer. Each year new programmes and specialisations are designed to help our students and alumni meet the challenges of the current science trends and the requirements of the labour market as well as to cultivate and stimulate individual passions and interests of the students and the academics.

The proof of the quality of the work conditions, education and opportunities for development is: the HR Excellence in Research Award from the European Commission, exceptional infrastructure awarded in a number of architecture competitions, a high rating for patent applications by the university and many awarded research, educational, artistic and scientific initiatives.

UNIVERSITY OF SILESIA
IN KATOWICE

University of Ostrava

University of Ostrava

The University of Ostrava (UO) is a public research university educating nearly 9,000 students in six faculties. Our Faculty of Science, Faculty of Arts, Faculty of Fine Arts, Faculty of Medicine, Faculty of Social Studies, and Faculty of Education offer a wide variety of disciplines and unconventional combinations of majors.

As a dynamic and intellectually challenging modern institution the University of Ostrava provides an international environment in which to study. Our campus is spread primarily throughout the old city centre providing a stimulating environment to contemplate the living arts and sciences. Teaching at UO is research-driven, and its programmes are often taught by active researchers.

The university is proud to retain lecturers, professors and researchers that are leading figures in their fields of expertise whom are scientists and inspirational and open-minded personalities with a vivid sense of creativity.

The small size of the university and its relative youth (founded in 1991) allows for a strongly individual approach to our students and flexible reactions to the needs of a modern society and labour market. The university offers high quality education and many possibilities for those who wish to fulfil their visions: whether in language study, founding a student organisation, or gaining practical experience. The university actively searches for opportunities for students to raise their qualifications and help them commence their careers.

The University of Ostrava has established cooperation with several local organisations (such as a local studio of the public Czech Television) that provide students with valuable work experience. Community engagement is an integral part of the university's mission of education and research. The UO and its faculties, student organisations and scientific institutes establish and promote hundreds of public events every year; which include free workshops, lectures, seminars, experiential events, scientific adventures, charitable events, international gatherings, sporting and cultural events, art exhibitions, happenings, alumni reunions, concerts, and theatre plays.

Mission and Vision

A university with a mission, open to the world, working for the region.
The University of Ostrava is an institution which sees its role in the development of the humanities and medical, science, and artistic fields in the local region, which has been traditionally associated with industrial and technological spheres.

It aims to contribute to solving urgent problems of the Moravia-Silesia Region in social, environmental, and health areas and to shape Ostrava as a truly university town. To this end, it intends to continue using its potential to reflect the identity, culture, and history of the region as well as to cultivate it through artistic creative activities.

The University of Ostrava is ready to bring progressive tendencies of European science and scholarship in the region and to create favourable conditions for internationalist cooperation and a friendly environment for foreign academics and students.

The university strives to be an institution that purposefully promotes quality scientific activities while systematically seeking out new research areas and teams with a potential to achieve excellent results.

The University of Ostrava opens itself to the challenges of contemporary society and develops a responsible, individual approach to a wide variety of students, including specific groups (seniors, socially disadvantaged students, students with special needs), and advocates equal access to education and friendly communication with the public.

UNIVERSITY OF OSTRAVA

University of Ss. Cyril and Methodius in Trnava

The Faculty of Mass Media Communication at the University of Ss. Cyril and Methodius in Trnava (FMK) provides higher education and organizes courses aligned with this mission.We support creative scientific research and artistic production. The main aim of FMK is to spread knowledge, to develop overall education of the society in the field of mass media studies and to support the development of personal and professional qualities of academic staff and students.

Our university is a modern, dynamically growing and ambitious institution that was established in 1997. The Faculty of Mass Media Communication is the fundamental and the most important faculty of the university. It also has a specific position in the Slovak education market – in particular – for its uniqueness to be the largest and the most complex media school in the country. It is considered to be the country's most desired school among students of media studies. The demand for graduates of our faculty ranks the institution among ten most prestigious faculties in Slovakia.

The faculty is also a research-development institution participating in scientific research in Slovakia and abroad. It cooperates with educational, research, artistic and art institutes.

FMK provides education in 5 study programs related to marketing, media, digital game studies and media literacy:

- Mass Media Communication (bachelor, master, PhD.)
- Marketing Communication (bachelor, master, PhD.)
- Applied Media Studies (bachelor, master)
- Media relations (bachelor) in English
- Theory of Digital Games Studies (bachelor, master, PhD.)

FMK provides both theoretical and practical education:

- Radio Aetter.sk
- Television FMK TV
- Magazine Atteliér
- Portal Gaudeo.sk

The faculty publishes an international scientific journal Communication Today, supporting a lot of research activities. It also manages international scientific conferences more times a year, involving the experts and research assistants from both, academic background and practice from various European countries as well.

Conference Megatrends and Media:
International scientific conference, supported by renowned media studies theorists, researchers and media professionals
Goal: presenting and exchanging knowledge and experience in media trends www.fmk.sk/megatrends-and-media/

Conference Marketing Identity:
International scientific conference, supported by marketing communication theorists, researchers and marketing professionals
Goal: Presenting and exchanging knowledge and experience in marketing communication, innovations and trends www.fmk.sk/marketing-identity/

Conference Quo Vadis Mass media, Quo Vadis Marketing:
Scientific conference of PhD. students and young researches, issues and new trends in mass media and marketing communication
Goal: Presenting and exchanging current knowledge and experience in mass media and marketing communication among PhD. students and young researches www.fmk.sk/quo-vadis/

JOURNALS

Communication Today – a scientific mass media and marketing communication journal – www.communicationtoday.sk

cieszyn

See you in Cieszyn

Legend has it that Cieszyn was founded in 810, when three brothers – Bolko, Leszko and Cieszko – met at a spring after years of separation and to celebrate this, they founded the town of Cieszyn [lit.: the place of joy]. True or not, Cieszyn delights all who visit this beautiful town. Charming old tenement houses, impressive buildings of Viennese architecture and a unique atmosphere – all this makes Cieszyn remain in the memories and hearts of tourists and residents. Despite numerous wars, fires and even earthquakes that hit Cieszyn over the ages, the medieval urban layout of the town has been preserved and many monuments and attractive places have remained intact. The city's unique atmosphere of the town has been created by a difficult and complicated history, the location on migration and trade routes and generations of its inhabitants representing different nationalities, religions, cultures and traditions.

Now let's take a walk through the streets of Cieszyn.

We start with the Market Square, which was founded at the end of the 15th century. The Medieval buildings were basically all destroyed by fire in 1552. At the beginning of the 20th century, the northern side of the square was rebuilt. This is also when the National House and the post office buildings were erected. The National House also known as the Polish House was the seat of most Polish organizations, libraries and printing houses. Today it is the Cieszyn Cultural Centre. In the middle of the square there is a baroque well with a figure of St. Florian from 1777 – a remnant of the former municipal water system. The southern frontage is the Town Hall, whose building was started over 500 years ago. The modernist tenement house at No. 7 and The Brown Deer hotel stand out from among many beautiful buildings around the town square. A hotel with
this name has operated here since mid 18th century. It hosted Tsar Alexander, Emperor of Austria Joseph II, Duke Józef Poniatowski and General Józef Wybicki. In Regera street there is an 18th-century classicist town palace once belonging to the Larisch Counts, which has been the seat of the Museum of Cieszyn Silesia since 1931. It is adjacent to the Peace Park with a statue of the museum founder and a lapidarium with sculptures and architectural details from past centuries. The park's name commemorates the peace treaty

The Well of Three Brothers

signed in Cieszyn between Prussia and Austria in 1779.

Another place, which must not be missed on the route of our walk is the Well of Three Brothers, which is strongly associated with the town's founding legend. It was already there in the fifteenth century, when it belonged to the Dominicans.

After descending the stairs to Przykopa street, you will find yourself in a picturesque corner of Cieszyn – *"The Cieszyn Venice"*. When in Cieszyn, to feel the climate of this place directly is a must. In the past, it was mainly occupied by craftsmen who needed water to run their businesses, such as potters, tanners, cloth makers and blacksmiths. Now it is one of the most charming corners of the town – the picturesque bridges over the water lead to the houses built on the banks of the canal. In the "W Bramie" Gallery you can see exhibitions of contemporary artists, not only from Cieszyn. You will

Cieszyn
robi wrażenie

Venice of Cieszyn

also find handicrafts here.

After climbing up Three Brothers street and turning left into Sejmowa street, we reach the main shopping street of Cieszyn – Głęboka street. At number 15, there is a German House erected at the turn of the 20th century, which used to be the seat of German associations, reading rooms and restaurants. Currently, it is the seat of the City Library. Opposite the Library there is the Old Market (Stary Targ). The statue standing on it - since the nineteenth century - is a Gothic sculpture of European rank. The Madonna and Child figures were crafted around 1365 in the studio of Peter Parler, the most famous sculptor of 14th century Europe. Now the there is a copy on the plinth and the original is kept in the Museum of Cieszyn Silesia.

Nearby is the Theatre Square, the first market square in medieval Cieszyn. It was here that the first St. Mary Magdalene parish church was built, with houses of the nobility around and the oldest Cieszyn school. After the great fire of 1789, a barracks was built on the site of the church, and the years 1908-10 saw the erection of the Theatre. Designed in the style of Viennese neo-baroque, it was established as a German theatre. From 1945, it has been named after Adam Mickiewicz, the Polish national poet. It has a rotating stage and a three-storey auditorium with 630 seats. Opposite the Theatre is the Bludowskis' House, built partly on the site of the former princely mint – now the seat of the Historical Cieszyn Library – a scientific library with a valuable collection of manuscripts, old prints and incunabula. At 42 Mennicza Street is one of the most impressive tenement houses in the entire street, designed by Józef Raszka and Alfred Wiedermann – the prominent Cieszyn architects. Nearby is the Museum of Printing (50 Głęboka Street), where an original printing workshop from the turn of the 20th century has been preserved until today.

After the descent of Głęboka Street you will find yourselves at the foot of Castle Hill – a place where everything in Cieszyn began. Formerly the seat of the Piast and Habsburg rulers, today it is a park with a number of unique structures. Did you know that the Piast Tower from the 14th century is 29 meters high and to climb to the top is simply a must? The platform at the top offers such a stunning view that you do not want to go down. The Rotunda - dating back as early as the eleventh century - is one of the oldest Christian temples in Poland. Its image is shown on the 20-zloty banknote.

Cieszyn brings to mind beautiful monuments, but also for local flavours that delight the senses of residents and guests. So do not omit to find out for

The Session Hall of the Town Council in Cieszyn Town Hall

yourself. Being in the town on the Olza, you must try the Cieszyn Sandwich, the iconic culinary symbol of the town, as well the confectionery special – the strudel. Once you have satisfied your appetite, it is time for a feast for the eyes in museums and at numerous exhibitions. There are four museums in Cieszyn and many galleries, including the galleries at the Cieszyn Castle and in the National House.

Cieszyn also offers a lot of walking trails. You can take a walk along the trail of the Piasts, Habsburgs, modernist architecture, churches, admire the beauty of Cieszyn nature. There are plenty of possibilities! There are handy mini-guides with marked trails to be picked up from the Cieszyn Information Centre free of charge. This, of course, does not exhaust the list of attractions waiting for tourists in Cieszyn, because it is difficult to list them all in a few sentences. One thing is certain – it is a town full of life and cultural events throughout the year. Full and up-to-date information on cultural events and the tourist offer can be found at www.cieszyn.pl (Calendar) and at the Tourist Information Centre located at the Market Square (Rynek 1).

See you in Cieszyn!

LAG Festival 2018 – *SECOND PRIZE of the Poster Competition*
Patryk Krygowski, PL

articles

Iwona Pomianowska,
National Film School in Lodz, Interdisciplinary Research Center
Innovation Lab, VRT

Modern Documentary in the age of Virtual Reality: Deepening engagement with nonfiction storytelling through technological innovation

After decades of research, technological development as well as few discouraging setbacks, virtual reality (VR) appears to be on the cusp of its settled adoption. The incorporation of VR technology into the palette of everyday communication media is not only exciting for filmmakers and game designers, but also for every manner of storytellers: documentarians, journalists, educators, scientists – all professions involved in clarifying the surrounding us reality and communicating about it. They all discovered that social change can be valuably stimulated by development of new technology[1], – technology that serves in the same time as a classic medium to communicate and spread this news around.

1 E. Mutekwe. *The impact of technology on social change: a sociological perspective*, Journal of Research in Peace, Gender and Development (International Research Journals) Vol. 2(11) pp. 226-238, November, 2012 (retreived on 11.11.2016 via: http://www.interesjournals.org/JRPGD); B. C. Bruce, J. K. Peyton, and T. W. Batson. *Innovation and Social Change,* Chapter 1 (1993) Bertram C. Bruce University of Illinois at Urbana-Champaign Champaign, IL 61820 (retreived on 26.08.2016 via: https://www.ideals.illinois.edu/bitstream/handle/2142/43892/Innovation%20and%20Social%20Change.pdf?sequence=2); E. Özlem Yiğit, Science, *Technology and social change course's effects on technological literacy levels of social studies pre-service teachers.* TOJET: The Turkish Online Journal of Educational Technology; Vol. 12(3), July 2013 (retreived on 15.09.2016 via: http://www.tojet.net/articles/v12i3/12313.pdf).

Considering the factors enabling us to disseminate stories captured by documentalists in a highly captivating, immersive way, we should mention at least 3 crucial elements:

- Conceptualization of reality in the context of the perceptual evolution of a spectator
- Factors determining the immersive strength of the story
- Implications of the technological innovation on the non-fictional storytelling

All these three factors interact and play off each other in terms of the changing threshold of perceptual tolerance as well as determine the engagement of spectator. The consecutive parts of this paper deal with these elements leading to the conclusions about the future of non-fiction storytelling and the evolving role of the viewer in it. Our paper will also deal with the peculiarly inspiring, recent cases of the VR technology implementations in non-fictional storytelling, which has the power to influence attitudes and to instigate social change. New media technology not only changes the nature of storytelling about reality, but fulfils the story that our reality builds. Structured conclusions about it will finalize the paper as a practical reference for the VR storytelling practitioners.

Evolution of documentary storytelling

The path defined by a documentary storytelling evolved from the still photography and advanced through better picture quality into a higher-definition video, reaching at the moment of virtual reality technique. The premise of the latest technique is to provide "true experience", to bring audiences closer to a story, give a feeling of presence, participation, sense of agency and affordances. Through allowing the first person experience of the events, immersive storytelling offers the opportunity to personally engage within a story, witness or even participate in the event by experiencing the perspective of a character depicted in the story[2]. In that sense the audience can be given with an unprecedented access to the sights and sounds as well as the feelings and emotions, which accompany particular experience. Added value of such medium is that the technique required for such experience is available almost in everyone's pocket: through a smartphone of a tablet.

2 Yangxingyue Wang. Virtual Reality: *A New Perspective in Storytelling* (2016); (retreived on 03.12.2016 via: http://www.newinc.org/blog-post/virtual-reality-a-new-perspective-in-storytelling); de la Peña, N, Weil, P., Llobera, J., Giannopoulos, E., Pomés, A., Spanlang, B., Friedman, D., Sanchez-Vives, M.V., & Slater, M. Immersive Journalism: *Immersive Virtual Reality for the First Person Experience of News*. Presence: Teleoperators and Virtual Environments 19, no. 4 (2010): 291 – 301.

There are number of articles dealing with the state of virtual reality in journalism and documentary filmmaking today[3]. It is not easy to categorize the particular cases, as the line between the immersive journalism and cinema vérité, where audio and video are being captured live from the physical world, is often not clear. Astonishingly, the palette of media that non-fiction authors can use to present their documentary content, is being widened every day at an incredible pace. Each medium has its own characteristics that can enhance different aspects of the content story – dependently on the creation strategy. Game designers put for example enormous effort in reproducing the conditions under which particular events unfold (procedure called "engine design"), whereas creatives designing linear narratives are most of the time more focused on outlining the logic of the events themselves[4]. As these forms used to function for a long time apart from each other, we see active effort within the industry being put in active dialogue between them. Games are getting richer in narratives and become more mighty to modify the storylines by offering a player the freedom of choice. "Games allow us to be who we are not, to do what we cannot, to be in places and times we cannot go... Through entertainment and action, we can educate in novel and powerful ways", says Keith Halper, CEO of KUMA Reality Games[4]. By immersive journalism, we often understand embodied experience that allows queries to the environment, but it is set within an unchangeable narrative and an individual's story trajectory. Such embodiment helps audience better understand the dynamics of situation and generate empathetic responses to nonfiction content that might otherwise be more difficult to convey[5]. According to Vivian Carol Sobchak, "embodiment" is a "irreducible ensemble" that entails both the body and consciousness, the objective and subjective perception of the environment. According to her, we owe our sense-making processes as much to our carnal existence as to our

3 C. Garling. *Virtual Reality, Empathy and the Next Journalism*. WIRED magazine. (retreived on 03.01.2017 via: https://www.wired.com/brandlab/2015/11/nonny-de-la-pena-virtual-reality-empathy-and-the-next-journalism/); Aronson-Rath, R., Milward, J., Owen, T. & Pitt, F., *Virtual Rality Journalism* (retreived on 13.02.2017 via: https://towcenter.gitbooks.io/virtual-reality-journalism/content/); Cosmides, L., & Tooby, J. *Evolutionary Psychology and the Emotions*. (2000) Handbook of Emotions, 2nd Edition. M. Lewis & J. M. Haviland-Jones, Editors. NY: Guilford. Leda Cosmides and John Tooby.

4 Halper, K., CEO of KUMA Reality Games (retreived on 26.01.2017 via: http://www.mediafieldsjournal.org/physical-world-news-in-virtual/2011/7/22/physical-world-news-in-virtual-spaces-representation-and-emb.html).

5 Farman, J. (2015) *Stories, spaces, and bodies: The production of embodied space through mobile media storytelling*. Communication Research and Practice Vol. 1 , Iss. 2, Pages 101-116 (retrieved on 27.02.2017 via http://www.tandfonline.com/doi/full/10.1080/22041451.2015.1047941); Hydénjava, L-C. (2013) *Storytelling in dementia: Embodiment as a resource*. Vol: 12 issue: 3, page(s): 359-367 (retreived on 20.02.2017 via: http://journals.sagepub.com/doi/abs/10.1177/1471301213476290).

conscious thoughts[6]. Such a concept of radically material condition of human being is in line with the thoughts of the existential phenomenologist Maurice Merleau-Ponty, who said: "the greatest lesson of the phenomenological reduction is the impossibility of a complete reduction", which gives the meaning of experience as it is embodied and lived in context[7].

The potential of virtual reality within the "non-fiction storytelling" domain has been intensively "tested" by consumers over the last 2 years. By releasing an application to present viewers with a spherical short "point-of-view" video on the plight of refugees, the New York Times distributed more than 1 million virtual reality cardboard glasses[8]. ABC News provided their viewers with the spherical view of a military parade in North Korea and of artefacts threatened by war in Syria[9]. The Los Angeles Times let people land next to a crater on Mars[10]. USA TODAY provided their customers with a sort of "travel time" experience – the visitors went on a ride in a bright pink '57 Havana Ford on the Universal Studios[11]. Even a situation of domestic violence has been brought into an immersive medium[12]. A significant effort is put in such experimentation in order to determine whether VR can be a feasible way to present news. The result of every trial is however dependent on the interplay between technological innovation, the psychological evolution of the viewer and the factors determining the level of immersion[13].

6 Sobchak, Vivian Carol. (2004) Carnal thoughts : embodiment and moving image culture. University of California Press (retreived online on 6.08.2017 via: https://culturetechnologypolitics.files.wordpress.com/2015/10/vivian-sobchack-carnal-thoughts-1_2.pdf).

7 Spiegelberg, H. (1965) The Phenomenological Movement: A Historical Introduction, 2nd ed., 2 vols. (The Hague: Martinus Nijoff, 1965).

8 New York Times; VR platform (retrieved on 26.01.2017 via: http://www.nytimes.com/marketing/nytvr/).

9 15 ABC News (16.09.2015) (retrieved on 26.01.2017 via: http://www.theverge.com/2015/9/16/9336647/abc-news-virtual-reality-syria).

16 Emamdjomeh, A., *Discovering Gale Crater,* Los Angeles Times (26.10.2015), (retreived on 26.01.2017 via: http://graphics.latimes.com/mars-gale-crater-vr/).

11 Doyle, P., Gelman, M., Gill, S., *Viewing the future? Virtual Reality in Journalism.* Knight Foundation (retreived on 16.11.2016 via: http://storynext.usatoday.com/state-of-vr.pdf).

12 Ziulkowski, K., *Vicious Circle,* created by NEW INC (retreived on 16.11.2016 via: http://www.karolinaziulkoski.com/).

13 Witmer, B.G & Singer, M.J. (1998) *Measuring Presence in Virtual Environments: A Presence Questionnaire,* Presence: Teleoperators and Virtual Environments, 7(3), 225-240.

An illusion of an external reality or a non-illusory experience of a virtual reality?

Extrapolating Marshall McLuhan's approach to the interplay between media, the sensorium, and reality[14] which are still unfolded with regard to the impact of virtual reality medium, new technology introduces new layer to the phenomenological experience of reality. By introducing the term of *engelism*, McLuhan claimed that *electric media* give us a dimension of a supernatural being[15]. *Electric man* as a disembodied spirit that exists everywhere have little chance to deal with the given reality (Understanding Media, 1964)[16]. "When social reality moves to the space induced online, not only do facts mutate to factoids, but also one's experience becomes virtual, meaning omnipresent and omnivorous"[17].

Closely related to this concept is the notion of *post-truth*, which has been established by the Oxford Dictionary as the Word of the 2016 Year. Post-truth is being defined as related to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief [18]. Virtual reality technology gives a chance to perceive the factual events again from a very concrete point of view and to experience own visceral reaction to an action that a spectator is exposed to. Does such embodied storytelling produce the illusion of an external reality? Or do they produce non-illusory experiences of a virtual reality? David Chalmers compared this dilemma to mirror illusion: "When one looks in a mirror, does one undergo the illusion that there is someone on the other side of the mirror, or does one have a non-illusory experience of someone on this side of the mirror? I will argue that at least for familiar users of mirrors, there is no illusion. Knowledge of mirrors provides a sort of cognitive orientation (a variety of cognitive penetration) that affects the content of visual experience and renders it non-illusory"[19]. A similar cognitive orientation is presumably present at the users familiar with the virtual reality devices, which allow them to render their experience as non-illusory. The fact

14 Genosko, Gary, ed. Marshall McLuhan: *Critical Evaluations in Cultural Theory,* Volumes I, II & III. London: Routledge, 2004.

15 Father Patrick Peyton. Interview with Marshall McLuhan on Television Show, "Family Theatre", 14 November 1971. (Retreived on 2.08.2017 via: https://www.youtube.com/watch?v=1uZYR3jmMng#t=16)

16 McLuhan, M. (1964). *Understanding Media. The Extensions of Man.* Mentor, New York.

17 Mir, A. (2017). The post-truth world: how social media destroy the absolutism of the "objective" truth. Human as media. (retrieved on 3.08.2017 via: https://human-as-media.com/2017/02/22/the-post-truth-world-how-social-media-destroy-the-absolutism-of-the-objective-truth/)

18 Post-truth (2016). In Oxford English dictionary online. Retreived online on 8.08.2017 via: https://en.oxforddictionaries.com/word-of-the-year/word-of-the-year-2016.

19 Chalmers, D. (2017). *Spatial Illusions, from Mirrors to virtual reality.* (Lecture retrieved online on 7.08.2017 via: https://www.youtube.com/watch?v=RKRX6CZLZOw).

that the virtual is not definable as an opposition to realism has led to two different paths of theoretical thoughts: one movement reassessed the illusionism as an aesthetic value on its own[20], the other one has accentuated the enunciative function of such illusion as deixis that works as "indexes" and refers to the elements of our reality[21]. Elsaesser and Hangener state however that "both these contexts break, at the conceptual level, with our traditional definitions of cinematic "realism", because "reality" in virtual reality is no longer understood as index, trace and reference of an elsewhere, but as a total environment: it thus is a function of a coherence theory (of truth), rather than a correspondence theory (of the sign)"[22]. Independently of this discussion, virtual reality made it possible to involve the spectator's presence even deeper. Experienced VR story is being compared to the *imaginary reality*, representations that spectator's mind grants reality status through the verbal, acoustic and visual references. Alexander Galloway[23] has even concluded that in a video game it is difficult to distinguish the diegetic acts from those non-nondiegetic ones as for the sake of game continuity these facts are being as seamlessly as possible fused. In this sense, the body of an operator (in this case a player), the control of the game and the action on-screen fuse to create an imaginary reality[24] that connect the machine and the human. Virtual reality appeals thus even more directly to the human senses and his body, but not in a straightforward, physical way. Thus, as narratives used to establish their diegesis by allowing the viewer to sense a consistent, temporal continuity and spatial contiguity, virtual reality and game environments establish diegetic coherence by directly co-opting the body of the player into the diegetic space. However, a great deal of emphasis is being put on the body-based nature of the experience, the tactile and haptic properties as well as bodily sensations within virtual reality are still often considered as distinct from pictorial illusionism. It seems that several different perceptual and cognitive systems are being deployed together to render the virtual reality effect - a continuous field, which in its amalgamation sucks a spectator into a fascinating state of immersive self-presence. Psychologists Witmer and Singer have distinguished and classified particular factors that influence the level of immersion while perceiving a story[18] – these factors as well as their operationalizations will be analyzed in the later phase of the article.

20 Garrett S. (1999). *Between Film and Screen: Modernism's Photo Synthesis.* Chicago, IL: Chicago University Press.

21 Deleuze, G. (1989). *Cinema I: the Movement-Image and Cinema 2: the Time-Image* (both trans. Hugh Tomlinson). Minneapolis, MN: University of Minnesota Press.

22 Elsaesser, T. & Hangener, M. (2015) *Film Theory Introductioin through the senses, Routledge,* New York.

23 Galloway, A.R. (2006). *Gaming: Essays on Algorithmic Culture.* University of Minnesota Press.

24 Stark, L., Choi, Y., & Yu, Y. (1997). Visual Imagery and Virtual Reality. New Evidence Supporting The Scanpath Theory Explains the Illusion of Completeness and Clarity. In V. Lakshminarayanan (Ed.), Basic and Clinical Applications of Vision Science: The Professor Jay M. Enoch Festschrift Volume. Springer Science+Business Media Dordrecht.

'Immersion' versus 'feeling of presence' – defining the terms

It is not evident to outline the relationship between the concepts of *immersion* and the *feeling of presence*. According to the framework for immersive environments of Slater and Wilbur, we can be *immersed* within the movie to that extent to which the computer displays are capable of delivering an inclusive, extensive, surrounding and vivid illusion of reality to our senses[25]. Therefore, the more we forget about the medium, through which we perceive the story, the more *immersed* in this story we are. Behind the concept of *presence*, we understand a state of consciousness, a psychological sense of being in the virtual environment. Therefore, we experience high *feeling of presence* when we have a more vivid memory "as if we were there". Such internalization of generated memories takes place not only via illusion that immersive media are able to evoke, but also through our imagery and mental representation. Elizabeth F. Loftus, an American cognitive psychologist, concluded from her extensive research on human memory that we have a natural tendency to create false memories – internalizing facts just by thinking about them or visualizing them[26], [27]. Another issue she was concerned with was how subsequent information can affect an eyewitness's account of an event. Her main focus has been on the influence of (mis)leading information in terms of visual imagery as well as wording of questions in relation to eyewitness testimony. She has been heavily involved in applying her research on "misinformation effect" by showing the enormous impact of immersion on our statements about the real life settings[28]. She indicated that a memory of an event that has been witnessed is highly flexible and that it can be modified or supplemented once a subject is exposed to new information just after the event. New information may dramatically influence what they recall. In that sense the experiences we gather in our daily, real life can get confused with the realistic information passed to us via an immersive medium as VR and vice versa.

25 Slater, M., Wilbur S. (1997) *A Framework for Immersive Virtual Environments (FIVE): Speculations on the Role of Presence in Virtual Environments,* Presence: Teleoperators and Virtual Environments, 6(6) 603-616, MIT Press.

26 Loftus, E.F. (1979). Cambridge, MA: Harvard University Press. (National Media Award, Distinguished Contribution, 1980). (Reissued with new Preface in 1996).

27 Loftus, E.F. (1980). *Reading, MA: Addison-Wesley*. (Reprinted by NY: Ardsley Press 1988).

28 Loftus, E. (2005). *Planting misinformation in the human mind: A 30-year investigation of the malleability of memory. Learning & Memory.* 12 (4): 361–366. doi:10.1101/lm.94705.

Creative factors of the virtual and gaming platforms that strengthen the immersive effect

Immersive storytelling can be encountered currently at least in three common forms:

- virtual reality which creates environments that allow people to be "present" in an alternative environment;
- augmented reality which starts with the real world and overlays virtual objects and information;
- spherical video, which captures an entire scene that viewer can visually explore by looking around 360 degrees.

What psychologists were scrutinizing for years, seems to be now the major driver of technological advance. Immersive media has developed rapidly to satisfy psychological needs, motivational expectations as well as perceptual comfort. In the paper "Measuring Presence in Virtual Environments: A Presence Questionnaire" Bob G. Witmer and Michael J. Singer distinguished four sorts of factors, that determine the level of immersion and the feeling of presence once being exposed to a Virtual Reality stimuli:

1. Sensory factors
2. Control factors
3. Realism factors
4. Distraction factors

These factors from the cross point of psychological and technological domains will be successively analysed, as follows.

I. Sensory factors

Sensory factors refer to the first stage of information processing[29] – processes specified and described by Cognitive Psychologists. Sensory stage of cognition, the bottom-up intake of information[30] is being counterbalanced with the "top-down" processing of information[31] (see: Control factors). Establishing the sensory congruence within Virtual Reality set-up is at this moment the biggest challenge for Virtual Reality designers to advance in the process of immersing the viewer. Witmer and Singer18 classified the sensory factors determining the level of immersion according to the following keys:

Modality of sensory information: The hierarchy of modalities involved in cognition may influence how much "presence" is being experienced. In fictional, cinematic storytelling, the visual layer is usually the richest one. However, because of the inherent multiplicity of information layers within documentary materials, other sensory channels may be evenly important in conveying the content – often compensating the imperfections of spontaneously recorded visual materials. Surprising reports on VR experience contain frequent statements, that the realism of auditory track is much more important for creating the immersion effect than the visual one and that the auditory imperfections can be much more distractive for the virtual experience than the visual ones.

Environmental richness: "The greater the extent of sensory information transmitted to appropriate sensors of the observer, the stronger the sense of presence will be"[32] (Sheridan, 1992). Sheridan emphasizes that such sensory richness should be structured within a particular set of the attention cues that the audience learns to follow. In the case of non-structured, spontaneous 360 recording, the attention cues are missing, which can lead to the confusion and the disengagement of the audience.

29 Craik, F. I., & Lockhart, R. S. (1972). *Levels of processing: A framework for memory research.* Journal of verbal learning and verbal behavior, 11(6), 671-684.

30 Gibson, J. J. (1972). *A Theory of Direct Visual Perception.* In J. Royce, W. Rozenboom (Eds.). The Psychology of Knowing. New York: Gordon & Breach.

31 Gregory, R. (1974). *Concepts and Mechanisms of Perception.* London: Duckworth.

32 Sheridan, T. B. (1992). *Musings on Telepresence and Virtual Presence.* Presence: Teleoperators and Virtual Environments, 1(1), 120–125.

Multimodal presentation: In case of the multimodal presentation, all the sensory information have to be presented completely, and all the senses coherently stimulated in order to increase the capability for experiencing presence. Held & Durlach (1992) refer, for example, to the situation where kinaesthetic motion can be enhanced with proprioceptive feedback[33].

Consistency of multimodal information: The supposition is simple: if the sensory description of reality from one modality differs from that received through another modality, presence may be disrupted[33]. This occurs while experiencing VR we simultaneously receive background information from the external world. As the fictional and nonfictional information channels are not consistent, one channel will work as a "distractor" to another one.

Degree of movement perception: Presence is enhanced when the observer is given the opportunity to perceive his/her own motion within the Virtual Environment. The feeling of presence is even more enhanced once the objects appear to move relative to the observer, according to the parallax motion.

Active search: Once the observer granted freedom of exploration and the possibility of active search, presence is being enhanced. Sheridan (1992) calls it a "control of the observer" to relate his/her sensors to the environment by modifying the scope of vision or to fine-tune the binaural hearing. A step further is the haptic exploration of the environment.

In 2016 at the USA Science & Engineering Festival, McCann New York's debuted the project *Field Trip to Mars*[34], virtual reality experience that took already thousands of young attendees to a martial surface. Young pupils travelled to another planet just by getting on a school bus, without realizing what was actually happening outside the bus. While the school bus was driving around Washington D.C., the passengers "were travelling" on the planet mars and exploring it scientifically through embedded storytelling and interactive infographics. This technologically advanced creation of educational and documentary storytelling became the most awarded campaign at Cannes 2016. Why? Framestore VR Studio succeeded in designing the first group virtual reality experience. It is one of the biggest "eye-openers—showing that the technology

33 Held, R. & Durlach, N. (1992). *Telepresence.* Presence: Teleoperators and Virtual Environments, 1 (1), 109–112.

34 Framestore Studio. *The Field Trip to Mars* (retreived on 18.01.2017 via: http://framestorevr.com/field-trip-to-mars/).

is no longer an obstacle once we strive to tell a good story by means of very well justified function of VR medium. Thanks to this first-of-its-kind technology, a great environmental richness has been achieved: passengers could see, hear and feel the unknown environment. Thanks to an appropriate hierarchy between the sensory channels, the presence of stimulation from the external as well as virtual world did not interfere with each other. Proprioceptive information from the motion and balance trajectory of the bus have been embedded within the virtual scene, through which the perfect perceptual consistency has been retained: every swing, turn or speed change of the bus was perfectly synchronized with the flow motion perceived on the virtual screens. Because of such deeply created immersion effect, students were extremely focused on the presented "visual material" and explored vividly the new environment through their four senses in the same time.

II. Control factors

Control factors are in the dialogue with the sensory factors – they respond to the "bottom-up" informational input with the "top-down" motivational, cognitive and control factors. The degree and immediacy of control, user's ability for anticipation of action, mode of control and the modifiability of physical environment, are the most important psychological issues determining the technological advances.

Degree of control: The more the user can control his task and interact with the environment, the greater feeling of agency and the information intake he experiences38. Some researchers consider the control over the situation presented in VR as a separate concept related to the feeling of presence[35], which is being naturally strengthen by agency, engagement and the perception of causality.

Immediacy of control: Any delay (temporal lag) between the user's action and the result of his action will seriously diminish the sense of presence in VE[36]. When such causality effect is maintained, and the continuity of action is perceived as realistic, the feeling of presence will not be interrupted[37].

35 Fontaine, G. (1992). *The experience of a sense of presence in intercultural and international encounters.* Presence: Teleoperators and Virtual Environments, 1 (4), 482–490.

36 Held, R. & Durlach, N. (1992). *Telepresence.* Presence: Teleoperators and Virtual Environments, 1 (1), 109–112.

37 McGreevy, M. W. (1992). *The presence of field geologists in Mars-like terrain.* Presence: Teleoperators and Virtual Environments, 1 (4), 375–403.

Anticipation: Apart of perception of causality, individuals experience greater sense of presence if they are able to anticipate or predict certain events of the scenario – independently whether these actions depends on them or not[42].

Mode of control: The more natural interaction with the virtual environment are being experienced and the fewer learning processes are required in order to interact, the more immersed the audience will become. If the modus of control is perceived by the user as artificial, the feeling of presence will be diminished. It can be increased again, though, once the responses become habituated[42].

Physical environmental modifiability: The ability to modify physical objects in the virtual environment enormously increases the feeling of presence[42]. The biggest technological challenge for spherical video currently is to accommodate the physical interaction within the environment as the 3D game design allows, e.g., moving around, manipulating and replacing objects. Such simple actions give the user a feeling of control over the virtual situation.

The importance of *control factors* have been researched by Ume.net Tech Lab in Sweden, which designed a virtual experience of visual lag[38]. They showed how the "story of our everyday life" changes dramatically once we perceive actions with temporal delay. Such a temporal gap varied between a one third of a second up to three seconds. As a technical set up has been used the Oculus Rift development kit (virtual reality display with built-in displays) in combination with Raspberry Pi (single-board computer programmed to adjust delay, resolution and buffering of the visual material). The temporal lag interrupted the perception of continuity and accordance of the action. The mode of control was seriously disrupted and the perceptual anticipation was in the beginning impossible. Surprisingly enough, after a while participants started to adjust to such incongruence and learnt the new perceptual frame of reference[39]. The insightful experiment of Ume.net Lab undermined through its demonstration almost all supposition of top-down control of action that participants need while dealing with virtual or real environment.

"I cannot resist fooling around with our established certainties. It gives me a great pleasure to deliberately mix up the second and third dimensions, flat and spatial, and make fun of gravity." [40]

M.C. Escher

38 Willems, O., (2015). *Even Pastors Hate the Inconvenience of Computer Lag.* (retreived on 16.11.2016 via: https://www.psfk.com/2015/06/connection-lag-umenet-b-reel-anr-bbdo-living-with-lag-series.html).

39 Webster, M. A. (2012). *Evolving concepts of sensory adaptation.* F1000 Biol. Rep. 4:21. doi: 10.3410/B4-21

40 *Reflections on the life of M. C. Escher* (25.09.2012) (retreived on 05.01.2017 via: https://figbash.com/2012/09/25/reflections-on-the-life-of-m-c-escher-2/).

III. Realism factors

As the *sensory and control factors* concern more internal features of the perception, the *realism and distraction factors* focus more on the environment: the virtual environment of the creation or the real environment, where the creation is being exposed.

Scene realism: By scene realism, we do not necessarily assume the real-world content, but the connectedness and continuity of the stimuli that are being experienced by the observer. When the elements of the environment seem to be semantically connected with each other and the particular elements of the presented world (scene content, texture, resolution, light sources, field of view (FOV), dimensionality, etc.) seem to co-exist in a continuous, spatial and temporal way, the feeling of presence is enhanced.

Consistency of information with the objective world: Held & Durlach (1992) emphasize that the presented world needs to be consistent with common knowledge about the presented environment[41]. Such information we learn through experience from the real-world environment, from exposure to certain stimuli (e.g., gaming) or in a structural way (e.g., school). Inconsistencies in reconstruction of previously known schemata's can be perceived as distractors.

Meaningfulness of experience: This factor determines the relevance of the VR presentation content to the particular observer. Personal relevance and adequacy naturally increases the motivation of participation and deeper focus on the content, which results in a bigger intake of information (learning effect). Other similar, personal factors are *task saliency* and *previous experience*[42].

Separation anxiety: Once the "feeling of presence" within a particular VE experience substantially increases, the greater the disorientation effect the observer can experience once he "returns" to the real world. Losing the real *frame of reference* is also one of the better measures of the immersion.

41 Held, R. & Durlach, N. (1992). *Telepresence.* Presence: Teleoperators and Virtual Environments, 1 (1), 109–112.

42 Immordino-Yang, M.H., (2015). *Emotions, Learning, and the Brain: Exploring the Educational Implications of Affective Neuroscience.* W. W. Norton & Co.

Realism is a crucial factor for nonfiction storytelling that will determine the value of virtual reality technology as a platform for documetary content. Knowing the factors increasing the immersion, we can convey a real story in an experiential form. However, the immersion effect can also make us believe the event that actually never took place (see: Loftus' research[43]). Besides that, the "real memories" even from a "not real situation" are being filtered through individual associations and personal context. The question is thus not, whether the VR can tell the non-fiction story in a realistic way, but whether the hyper-realistic fictive creation will not dominate the facts behind the story.

"We do have to have ethics conversations," but "the technology will be successful no matter what, (...) every technology has downsides; the only question is how do we handle it as a society." [44] (Mike Rothenberg, head of Rothenberg Ventures).

One of the studios that succeeded in presenting valuable VR documentaries of high scene realism are productions of Felix and Paul[45]. For example, *The Nomads see Gypsies* VR film gives an opportunity to encounter the Sama-Bajau people, who have lived for centuries on the sea coasts of Borneo. They also introduced new form of commercial entertainment, where aesthetics and creation of a product still does matter, but is based on a realistic set up, almost non-fictive registration of situation. Video clips "Starangers" of Patrick Watson created by Felix and Paul studios[46] illustrate this concept very well. What is the measure of success of such a short, immersive form? Witmer & Singer speak about separation anxiety, the feeling that prevents form leaving the virtual situation and coming back to the real environment[47]. Naturally such effect is increased once the virtual world is also partially based on facts and gives the possibility to participate not easily accessible events.

43 See footnotes 32, 33, 34.

44 Seetharaman, D. (2016) *What does virtual reality do to your body and mind?* (retreived on 15.02.2017 via: http://www.theaustralian.com.au/business/technology/what-does-virtual-reality-do-to-your-body-and-mind/news-story/53d02a9c507f990da7ab00fa0088c8dd).

45 Felix & Paul Studios, *Nomads, See Gypsies* (retrieved on 30.01.2017 via: https://www.felixandpaul.com/?projects/sea_gypsies/credits).

46 Felix & Paul Studios, *Stranger* (retrieved on 30.01.2017 via: https://www.felixandpaul.com/?projects/strangers).

47 Witmer, B.G & Singer, M.J. (1998) *Measuring Presence in Virtual Environments:* A Presence Questionnaire, Presence: Teleoperators and Virtual Environments, 7(3), 225-240.

IV. Distraction factors

As the *realism factors* concern the VR content itself, the *factors of distraction* concern the environment in which such VR experience has been exposed and its possible interaction with the VR content on a sensory and control level.

Isolation: According to the *consistency of multimodal information rule*, stimulation non-belonging to the story (thus from the actual, physical environment) should be limited to its maximum in order to isolate users within the experienced storytelling. That is why it is impossible to compare the level of immersion achieved by the audio-visual storytelling conveyed via traditional AV media (e.g., two-dimensional, flat screen display) with the immersive storytelling conveyed by spherical (sometimes even interactive) video, as the conditions of experiencing those two media contents are totally different (e.g., because of the presence or absence of ambient noise, external distractors, etc.). The quality of the VR headset itself, through which the synchronized visual and auditory VR inputs are provided, is thus of crucial importance and one of the biggest technological challenges as they should be capable of isolating the wearer from the external world and at the same time comfortable and as small and light as possible.

Selective attention: Referring to the freedom of sensory exploration (active search), the observer should be given the opportunity to explore the presented world according to his own processing style, intentional focus, interest and goal. Once such focus is possible, the observer can de-filtrate the external, non-relevant and distracting stimuli from the external environment.

Interface awareness: Held and Durlach (1992) assert that in order to maximize the feeling of presence, interface should be almost "invisible" so that the observer is no longer conscious of presence[48]. Unnatural devices or artefacts should be thus avoided as interfering with the feeling of *being there* – beyond the interface.

Isolating from external stimuli, providing the freedom of attentional exploration as well as making the viewer forget about the interface, are the key features of immersive set-up. We should be aware at the same time that the potential distraction can also work in the opposite way. Latest research is exploring

48 Held, R. & Durlach, N. (1992). *Telepresence.* Presence: Teleoperators and Virtual Environments, 1 (1), 109–112.

positive effects of the set-up, in which the virtual application is being explicitly used as a distracter towards the original, realistic perception:
"There are over 100 clinical research papers that are already published that show proven positive clinical outcomes using VR in managing chronic pain, anxiety and depression(...)andindementiapatients,allthosethreeelementsareverycommon."[49] Dr. Sonya Kim treats her patient with VR exposure in order to deal with the depression and anxiety. By providing fictive VR creation, she stimulates non-fictive story in the patients mind, so that the patient can refer his/her experience to another frame of reference. Similar use of immersive VR is performed for chronic pain management[50].

Conclusions on the factors determining immersion

Keeping these all aspects of immersion in mind, as well as the natural limitation of documentary filmmaking, the process of non-fictional storytelling is inherently an exercise in compromises and trade-offs on a spectrum of time, cost, and quality of an outcome. A combination of the limitations in technology, narrative structure, and journalistic intent determine the degree of agency given to users in a VR experience. At the same time, there are ongoing debates questioning the ethics of showing a fully spherical view of a scene without the ability for a journalist to focus on a particular viewpoint. The question is whether the inconsistency between the six degrees of freedom non-interactive layer of 360 video won't reduce the authenticity of the journalistic story.

The technological and perceptual possibilities do not entirely determine the experience of virtual set-up though. All the immersive factors: perceptual congruency, feeling of control, realistic set-up and reduced distractors[51], function in storytelling and advance the author's objective as well as his impact on his recipient through the non-fictional creation. Nonetheless, does the individualization of experience individualize the opinion about the experienced content as well? As the media become more and more immersive and the authenticity of experience and semi-participation is continuously improving, a new critical view on reality and currently produced documentaries is needed. Virtual reality technology represents a revolutionarily new narrative form – even though the technical and stylistic norms are in their infancy.

49 Platoni, K. (2016) *Virtual Reality Aimed At The Elderly Finds New Fans.* (retreived on 03.02.2017 via: http://www.npr.org/sections/health-shots/2016/06/29/483790504/virtual-reality-aimed-at-the-elderly-finds-new-fans).

50 Li, A., Montaño, Z., Chen, V. & Gold, J. *Virtual Reality and pain management: current trends and future directions.* Pain Management 1 (2011), 147-157.

51 Witmer, B.G & Singer, M.J. (1998) *Measuring Presence in Virtual Environments: A Presence Questionnaire,* Presence: Teleoperators and Virtual Environments, 7(3), 225-240.

Reflections of VR practitioners

While thinking about the immersiveness of non-fiction storytelling we should reconsider a few aspects of its narration, authorship, and its content. The narrator, for example, can be present in the field of the viewer's spherical vision, however we can also try to convey the author's very point of view from the first-person perspective. The storytelling gets in that case even more personalized, yet we can also try to universalize the story. We can consciously increase or decrease the spectator's feeling of presence. We can stimulate the spectator's independent exploration, or we can introduce "live narratives" guiding the attention of the viewers. Gradation of the self-exploration depth will affect the engagement, whereas replicating the traditional film narratives can leave the viewers wondering where they should look and being concerned about missing the most crucial element of the action in the scene.

Multiple questions about the future of VR are being posed, mostly whether it will survive or lose out to a new medium on the market. There are voices claiming that the technological investment of VR is already too big to let it fail, whereas others assume that it has already reached a critical mass of the market. Analysts of the immersive journalism, Migielicz and Zacharia claim that "with the exciting content that has been produced so far, the trajectory for quality content in the VR space already has a foundation. Once you experience a VR "ah-ha" moment, you can't wait to find the next one"[52]. To let the VR function within the palette of current, broadly used media, we should ensure that its use is justified and once employed, the whole potential of the spherical, 3D image is being addressed. The advantage of the VR medium lays in letting the viewers reach those locations that are normally inaccessible, deepen their understanding of a witnessed story by being personally present at the location (beyond the written narrative), and actively explore the environment by turning their heads side-to-side. Using the VR medium is not justified once the presented location or an event can be attended by the viewers in reality, once introduced technology doesn't provide any added value on the informational or emotional level, or when the action is centred and takes place only in front of the viewer.

The VR medium has specific dynamics, which distinguish its use from the other platforms. Virtual experiences should be intensive but they shouldn't last longer than four or five minutes, otherwise the viewers get fatigued. VR storytelling also doesn't function so far as a stand-alone independent

52 Migielicz, G. & Zacharia, J. (2016) *Stanford Journalism Program's Guide to Using Virtual Reality for Storytelling—Dos & Don'ts.* (retrieved on 26.01.2017 via: https://medium.com/@StanfordJournalism/stanford-journalism-programs-guide-to-using-virtual-reality-for-storytelling-dos-don-ts-f6ca15c7ef3c).

channel – it can reach a much broader public once it is encompassed as an "add-on" within a broader campaign and a distribution strategy. Finally, the extraction of the content is more efficient, once the public is being previously briefed about the matter via traditional media[58].

Conclusions

Virtual Reality has an enormous potential that goes beyond the traditional storytelling – especially when we talk about stories about us, human beings, our culture and the surrounding reality. Medical and psychological applications of VR technology improve the quality of life, bring people closer to each other and facilitate empathy, social behaviour as well as interrelations[53]. Referring to the Metz's concept of the imaginary signifier, VR gives a spectator even better ground to identify with himself in a pure act of perception[54]. In his essays on psychoanalysis of cinema[60] Metz focused on the affective dimension of vision, an emotional tie that Freud placed at the origin of identification[55]. Metz argued that spectators are left to themselves having have to rely on their own perceptions and emotions. That effect seems to be even stronger in case of VR reception, where the non-framed field of view without editing structure leaves a spectator the freedom of as (s)he had never before. At the same time VR platform enhances the exploration of the cinematic diegesis through the engagement of the broad palette of senses. In that sense the relationship between the cinema and spectator meaningfully evolves, which is being accentuated by Elsaesser and Hagener in their book "Film Theory: an introduction through the senses"[56]. Highlighting the "reception of the story through senses" they pointed out increasing interactions between the screen and the spectator's mind, body and emotions as well as the distinctive configurations of senses engaged in varied VR creations. They concluded as well that entering the digital era, the film theory needs a revision as well as a broadening of its philosophical framework in order to encompass the transformations, as the existing theories limit the current act of reflection[62].

53 Hodges, L., P. Anderson, G. Burdea, H. Hoffman, and B. Rothbaum, *Treating Psychological and Physical Disorders with VR.* IEEE Computer Graphics and Applications, invited article, pp. 25 - 33, November/ December 2001.

54 Metz, C. (1982). *The Imaginary Signifier: Psychoanalysis and the Cinema. Bloomington:* Indiana University Press.

55 Halperin, S. & Shakow C. (1989). *The development of identification in Freudian theory. Psychoanal Review* 76(3):353-74.

56 Elsaesser, T. & Hangener, M. (2015) Film Theory Introductioin through the senses, Routledge, New York.

VR is not only the medium that for the first time conveys the experience from the first person perspective. It can also serve as a virtual expansion of the physical spaces, such as cities, schools or museums[57]. The new virtual environment has modified the meaning of our key metaphor existing in the film theory: "window versus frame", which has been often associated with the concept of "realism". According to the classical theories of Bazin and Eisenstein, frame and window have been perceived as oppositions, whereas their phenomenological conceptualization of Maurice Merleau-Ponty represents them as a "window/frame container" where the dimensions of time and space are compound. The cinema has always been preoccupied with the dimensions of the reality and the bodily sensations of them by dealing with matters of life extending the projection moment. The recent comeback of the documentary via digital media accentuates the realms of identity beyond the individual experience, ''being-in-the-world''. It is a significant player in the public sphere and is equally owed to the changes in the technological sense as well as in the social and cultural sphere that emerge in the digital age. Bearing in mind the long history of anthropomorphism applied to the technologies of cinema from the "camera eye" of Dziga Vertov[58] via Béla Balázs *visible man*[59], to Laura Marks' *skin of film*[60] and Gilles Deleuze's the *brain is the screen*[61], the digital image breaks with the ocular-centric paradigm, by turning more into the concept of "haptical vision", mainly due to the proximity, tactility and sense of texture intuitively perceived through the digital image. Deleuze's definition of cinema as the immediate expression of pure movement[62] put a "philosophical tum" on film theory coincided with digitization. In consequence certain paradigms have been weakened, as "subjectivity" or "representation", whereas main definitions of the cinema have been linked with the digitization process. The cinema as we have known it for its first 100 years is there no more. Whether the film theory

57 Bonis B., Stamos J., Vosinakis S., Andreou I., Panayiotopoulos T.: *A platform for virtual museums with personalized content. Multimed.* Tools Appl. 42(2), 139–159 (2009).

58 Dziga Vertov. Kino-Eye (1924)

59 Balazs, B. (2010 [1924]). *Early Film Theory: Visible Man and the Spirit of Film,* ed. E. Carter and trans. R. Livingstone. Oxford: Berghahn. Bettelheim, B.

60 Marks, L. U. (2000). *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses.* Duke University Press.

61 Flaxman, G. (2000). *The Brain Is the Screen. Deleuze and the Philosophy of Cinema.* University of Minnesota Press. Minneapolis. London.

62 Deleuze (1983). *Cinéma I: L'image-mouvement.* Trans. Cinema 1: The Movement-Image (1986).

redefines itself around the digital concept (as suggested by Friedberg[63], Cubitt[64] and Spicer[65]) whether the image-anthropologists will "inherit" film theory (as imply Belting[66] or Didi-Huberman[67]), or whether philosophy or cognitivism will become the master film discipline, it is sure that complex relationship delineated between a body, its senses and the cinematic interfaces will play one of the most important roles in the future evolution of the audiovisual medium of storytelling.

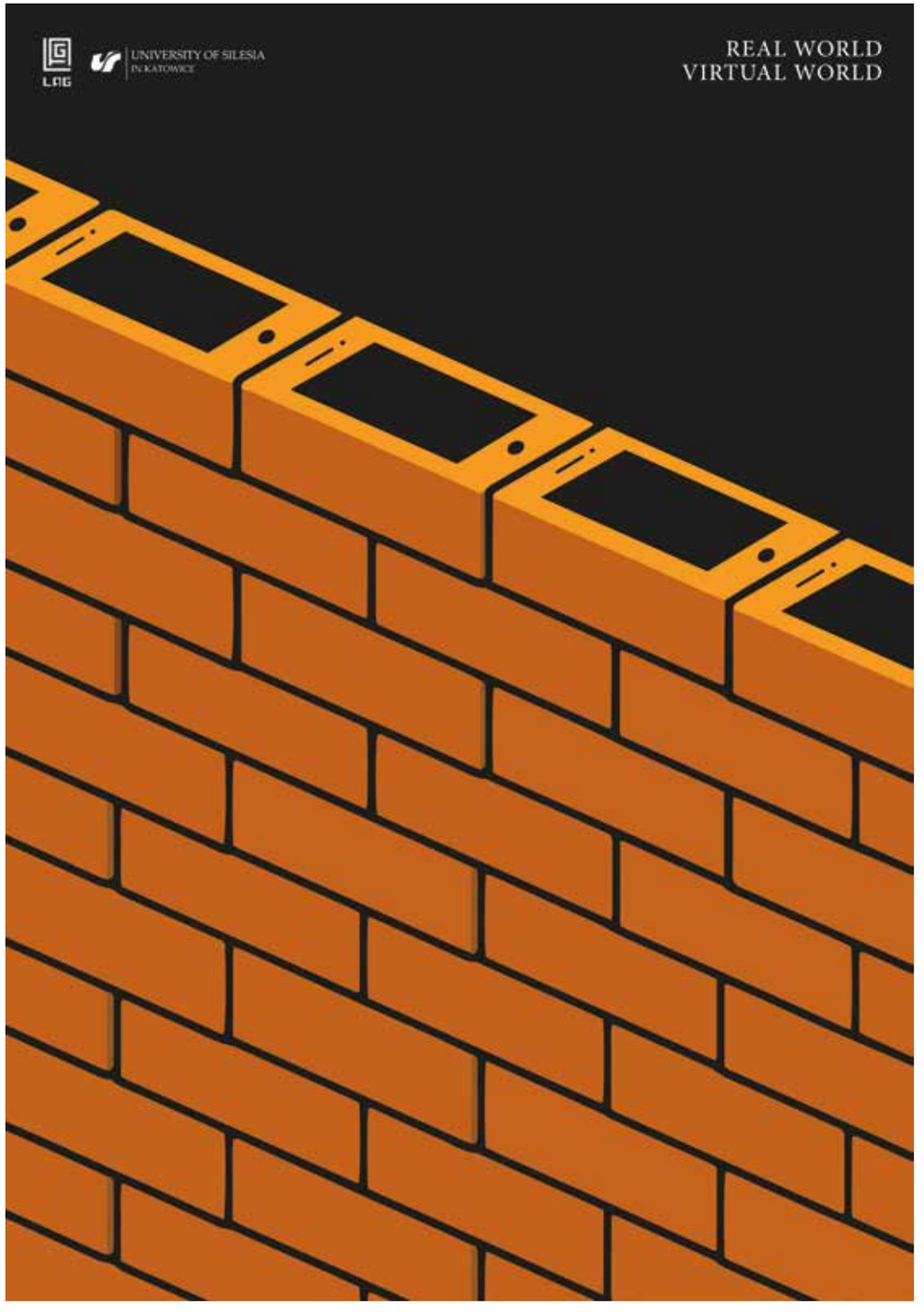
63 Friedberg, Anne. 1993. *Window Shopping: Cinema and the Postmodern.* Berkeley, Los Angeles & London: University of California Press.

64 Cubitt, S. (2004). *The Cinema Effect.* Cambridge, Mass. & London: MIT Press.

65 Spicer, A. H. (2012) Film and visual culture. In: Heywood, I., Sandywell, B., Gardiner, M., Gunalan, N. and Soussloff, C. M., eds. (2012). The Handbook of Visual Culture. (retreived on 10.08.2017 via: eprints.uwe.ac.uk/8379/1/FilmandVC6.pdf)

66 Belting, H. (2011). *An Anthropology of Images: Picture, Medium, Body.* Princeton: Princeton University Press.

67 Didi-Huberman, G. (2005). *Confronting Images: Questioning the Ends of a Certain History of Art;* trans. John Goodman. University Park, PA: Pennsylvania State Universoty Press: 2005, 142-3.



LAG Festival 2019 – *FINALISTS of the Poster Competition*
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Digital game as a culture-creating social factor

Foreword

Digital games are the latest answer to the human need for playing games. They are a phenomenon of the last decades of 20th century as well as the millenium and post-millenium era. Because of their novelty, many researchers are focusing on the subject from different angles, taking into account its different aspects. Academic debate on whether digital games can be classified as art or just pure entertainment, or whether they are harmful or, on the contrary, useful for the society, is still in progress. Many researchers are also focusing on the psychological matter while others indicate educational character of digital games when discussing their impact on the individuals and on the society. Overall, digital games are a new way of expression for their creators and users alike, and they undoubtedly play an important role in cultural processes as well as in the social phenomena of our era – as a new medium on a mass scale.

I. Roots of Games and Regulations

The tradition of playing games is as old as the human race. Archeological discoveries show that games were popular in Ancient Egypt, Mesopotamia, India, China and Africa. In the European tradition there was a festival called Saturnalia in Ancient Rome. The holiday was celebrated with a sacrifice at the Temple of Saturn, in the Roman Forum, a public banquet, followed by private gift-giving. Continual partying and a carnival atmosphere overturned the Roman social norms: gambling was permitted and masters provided table service for their slaves.[1] Some games were overturning social norms, where a "savage/slave" could turn to a "noble man/king" and vice versa. Although a player of computer or digital games is not changing his social status[2] and he can be anybody he pleases to be. In the ancient times we can find the roots of digital games, where the player takes on the role of the played character.

1 MILLER, J. F.: *Roman Festivals, in The Oxford Encyclopedia of Ancient Greece and Rome* (Oxford University Press, 2010), p. 172.

2 Exceptions are game-dependent players, but it is not the case for one certain game, but a long process. Comment by the author.

Not all historical and cultural periods favoured playing games, especially gambling. Pravdova writes: *„It is not only about sharing information and ideas, but about spending leisure time implicitly on fun and pleasure."*[3] There are many examples from the past where certain games were forbidden, especially those involving gambling, as they were considered an improper pastime activity. Faris[4] writes about the first known prohibition of games: *„From one Plaut comedy, Milles Gloriousus, which dates back to the late 3rd or early 2nd century BC, there is a first proof of a legislative ban on dice, and in later years other laws specifically prohibiting it are known from ancient Rome and other laws prohibiting playing dice (some other forms of gambling, such as sports bets, were allowed, and during the holiday of Saturn, playing was generally allowed)."*[5] Gambling in recent years was going through tremendous changes. Slot machines have been prohibited in all countries of Central Europe and only licensed providers such as casinos can administer these types of entertainment, or games can be played online.

II. Digital Games as Massmedium

As Huizinga writes, many human activities are connected with the need to play, which makes it part of cultural activity and social structure. His character, Man the Player – *Homo Ludens* – changed our perception of culture, past and future. Huizinga writes: *„We shall not look for the natural impulses and habits conditioning play in general, but shall consider play in its manifold concrete forms as itself a social construction."*[6] IIf The Game itself is not only a cultural phenomenon, but is also deeply rooted in the social structure, its mass character emerges from the beginning. Contemporary masses with the spread of the fast Internet connection across the globalized world are taking the games to a new level.

Thanks to the Internet, digital games are associated with another new media tools such as Cyberspace and Virtual Reality. This simulates a real or fictitious world in an interactive way, which gives the game players more opportunities to connect with the outside world. It all actually started in 20th century. This age can also be called the century of the masses – the century of mass production, mass communication and mass connection. Radio, Film and finally Television and its great popularity created mass culture as we know it.[7] But for most of the youth today, the traditional media previously mentioned, as well as the print media, are considered to be old – fashioned and are not as popular as they use d by the previous generations. The Millenials are using new media frequently only because of the Internet – the widest and quickest mass medium that has ever been used by society (mostly Western society). The Internet is providing a cyber space connected by the net of social structure used as the Encyclopaedia, information storage and communication tool, to mention the essentials. Its environment is unique because it also affects our attitudes, inhibitions, feelings or the sense of responsibility, emotions, impressions of others, as well as relationships.

III. Solitude in gaming

Games in the past were a domain of mainly two or more players. They were played in person, face to face, during meetings and gatherings. Such meetings took place mostly in the public spots and they played an important social and cultural role. Huizinga[8] writes: *„Naturally enough, the connection between culture and play is particularly evident in the higher forms of social play where the latter consists in the orderly activity of a group or two opposed groups. Solitary play is productive of culture only in a limited degree."*

Games played on the Internet – online – allow players to be connected with the world, with another player/s and to play by means of a device: a computer console or a mobile phone. In the era of globalisation distance play is possible, with the players far away from one another. To play a digital game "alone" means to play with a pre-programmed artificial intelligence. Any lack of social connection is dangerous for an individual, in this case for a player, because it leads to the destruction of social contact as well as the individual's wellbeing from the psychological point of view. These facts could lead to social isolation, social deprivation, antisocial behaviour, dependency or even addiction.

3 PRAVDOVÁ, H.: *Sociokultúrne dimenzie hier v kybernetickom priestore. In: Kyberpriestor ako nová existenciálna dimenzia človeka.* Łódź: Księży Młyn Dom Wydawniczy Michał Koliński, 2014, p. 132-159.

4 FARIS, S. B.: *Changing Public Policy and The Evolution of Roman Civil and Criminal Law on Gambling.* UNLV Gaming Law Journal: 2012, vol. 3, nr. 2, p. 202 [quote: 5.5.2019] Available at: http://www.scholars.law.unlv.edu/cgi/viewcontent.cgi?article=1041&context=glj

5 Ibidem

6 HUIZINGA, J.: *Homo Ludens a Study of the Play-Element in Culture,* London, Boston and Henley: Routledge & Kegan Paul, 1980, p. 4.

7 KŁOSKOWSKA, A.: *Kultura masowa.* Warszawa: Państwowe Wydawnictwo Naukowe PWN SA, 2005, p. 205.

8 HUIZINGA, J.: *Homo Ludens a Study of the Play-Element in Culture,* London, Boston and Henley: Routledge & Kegan Paul, 1980, p. 47

Bendová[9] in her book argues that most people not only consider digital games not to be a form of art, but they feel that games are a harmful phenomenon which should be heavily regulated as they lead- particularly in case of young people - to social isolation, violent behaviour and gambling addiction. Game addiction, like any other addiction, can consume too much of the players' time and affect those around them, ruin relationships and families. In the USA there are camps for the people addicted to game playing, most of whom are young people. Some of these camps are for children as young as 10 years old.[10] An extreme case emerged on the western news in 2010 from South Korea[11], when couple neglected their 3 months old daughter to play a game in a cyber cafe. The game involved raising a virtual character of a young girl. Their real child died from starvation. Similar cases of antisocial and criminal behaviour connected to gaming are known to have occurred in Japan, China and The USA. Children are the most likely to become addicted to playing video games. This is a new concern challenging the society to deal with – currently and in the future.

Globalization has connected the world, but at the same time it has created solitude. It is not only the gaming problem, but we can see a parallel with the social media. The ongoing social debate whether playing digital games is useful or harmful to the society is still disputable, as well as the voices in favour of regulations of games. Although digital games have always been viewed as a waste of time, energy and money, distracting young people from important issues, the addictive character of the games with its impact on children on such a scale is an alarming phenomenon.

IV. Art to thrill, or fun to enjoy?

Digital games often come under criticism both from the authors and the public, for their addictive character or a waste of players' precious time.[12] Thus a question arises: Could art be addictive? Some authors think that the definition of art is too limiting for digital games. Nevertheless, the tendency to evaluate games as a specific art medium is growing.

9 BENDOVÁ, H.: *Umění počítačových her,* Praha: Akademie múzických umnění v Praze, 2016, s. 46

10 Camp Pocono Trails https://www.summerlandcamps.com/gaming-addiction/summer-camp-video-game-addiction/

11 TRAN, M.: *Girl starved to death while parents raised virtual child in online game.* The Guardian, view [read: 7.5.2019] online on:
https://www.theguardian.com/world/2010/mar/05/korean-girl-starved-online-game

12 PRAVDOVÁ, H.: 2014. *Sociokultúrne dimenzie hier v kybernetickom priestore. In: Kyberpriestor ako nová existenciálna dimenzia človeka.* Łódź: Księży Młyn Dom Wydawniczy Michał Koliński, 2014, p. 132-159.

Author Chris Crawford in the 1980s saw video games as a new form of art. Finally, in 2005 Nic Kelman in his book Video Game Art[13], was first to consider digital games as a real form of artistic expression, in the context of the history of Art and the post-modern cultural perspective. There are authors and even professionals in the field of games creation and production who consider the issue to be the opposite. They argue that games never were and never will be pieces of art, because they function in a different way and art definitions are too limiting for such a medium. There is also an argument stating that the classification of games as art is actually harmful to the games themselves, as this would limit the perception of the games by depriving them of their specificity and originality.[14] Important aspect of the art-non art debate is the market which creates and provides games to the customers. Market and marketing much or less dictates what would be created. Developers and distribution companies define in advance what audiences they will target and what type of product they want to offer. Accordingly, it depends on what games they have, or have no chance to be created.[15] By 2010 most analysts predicted that the digital game industry will be larger than the film and music industries combined. The games business today already command Hollywood budgets and teams of dozens of artists, writers, musicians, and designers. Whether digital games are a form of art is a debatable question.

Conclusion

Social aspect of digital games is a broad subject. The above debate focuses on the question whether digital games are a form of art or a business dictated by the market. On the other hand, a harmful character of digital games on the society has also been discussed. Playing digital games can lead to social isolation and deprivation in its extreme form. From these two points a question arises: Can art and play be harmful or even dangerous for the society?

Few publications are dedicated to games as an art form. Digital Game Art is a pioneering foray into what promises to be the dominant art form of this century. If the market dictates what should and shouldn't be created, the product is not a work of art. There are also small companies not depending on popularity and finances where the real potential for art creativity can be found. In further years more questions are due to arise and more social aspects of the digital games will undoubtedly be discussed.

13 KELMAN, N.:*Video Game Art,* New York: Assouline, 2005

14 BENDOVÁ, H.: *Umění počítačových her,* Praha: Akademie múzických umnění v Praze, 2016, p. 46

15 Ibidem. p. 8.

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Geocatching game https://www.geocaching.com/play [online] [viewed: 8.5.2019]

HUIZINGA, J.: *Homo Ludens a Study of the Play-Element in Culture,* London, Boston and Henley: Routledge & Kegan Paul, 1980.

KELMAN, N.: *Video Game Art*, New York: Assouline, 2005.

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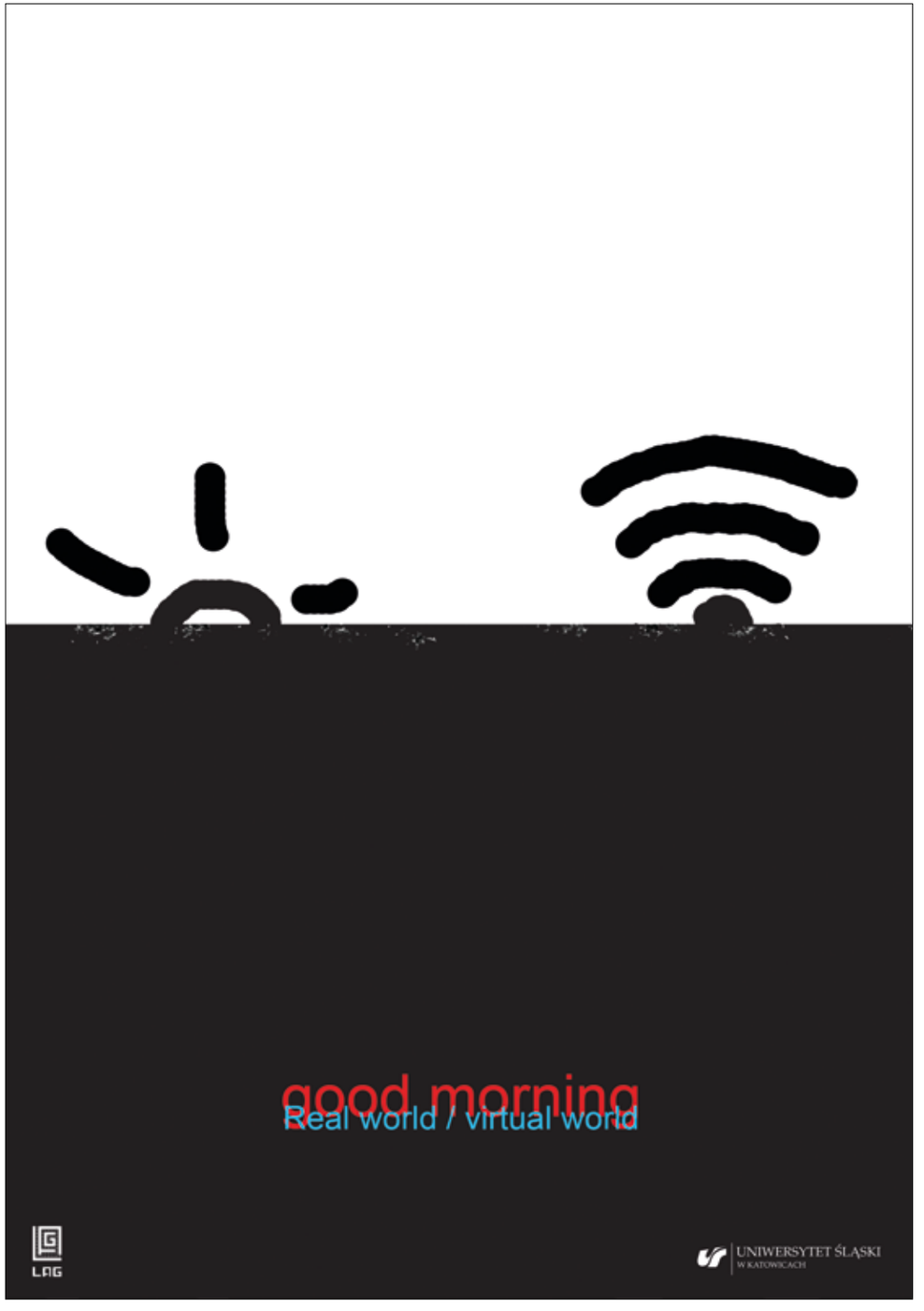

LAG Festival 2019 – *FIRST PRIZE of the Poster Competition*
Nicos Terzis, SE

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Basic principles of animation

The word animation comes from the Latin word *anima (soul)*. Therefore, to animate means to enliven an inanimate image, to "inject the image with soul". Nowadays, it is is generally known that the motion of a resulting image created by means of animation is actually a sequence of individual images. These can be obtained using a variety of methods and techniques such as drawing, cut-out, 3D, pixilation, rotoscoping animation, etc. My animation teacher, artist and animator Ilja Novák, has repeatedly said that animation was primarily a game. Not just motion, because even inanimate objects can move, but they can be enlivened only thanks to the game play. Thus, the basic principles of animation could be divided into two groups – **craft and game**. The first group includes purely functional rules, ensuring the creation of the illusion of smooth and undisturbed motion. The second group deals with processes and procedures that revive the actual motion, giving it a spirit, or an emotion. The game constitutes a creative component that generates an impression whether it is neutral, comic, or dramatic. In the computer game environment, we very often deal with animation; it is in fact one of the key elements of each game's visual component. No matter if it is a 2D or 3D environment, an authentic and interesting animation may dramatically enhance the impression from the game, create a greater sense of reality, or spice up the storyline in a funny way.

But the foundation of any animation is the craftsmanship of basic principles I will address in the following lines.

The first and most important component that affects animation is *the frame rate*, i.e. a number of consecutive images called *frames* displayed in a set number of seconds. The basic frame rate value is based on the rate of play of individual film frames when projected onto a movie screen in a classic cinema projection, which was 24 frames per second. However, this number of frames only concerns the film shot on a camera. For creation of a continuous and smooth illusion of motion, it is sufficient for the human eye to see approximately half of that amount, 12 frames per second. Of course, in the case of animation captured manually frame by frame, this meant a significant easing of work for animators. For example, with hand-drawn animation, 12 frames – the phases of movement – is still used today.

The use of computers has enabled some processes to be greatly simplified – the phases of movement that do not require animator input can be "calculated" and inserted mechanically. But here, too, we need to keep in mind some of the principles for the proper creation of the illusion of motion.

Craftsmanship basics of animation

Pause
One of the basic rules is that if there is a stop in the action at some point, after which it then continues, there should be a minor delay at the point of pause, at least 4 frames at 24 fps (2 frames at 12 fps). This will prevent unnatural oscillation.

Easing
Near the beginning or end of a movement or action, or at the point of a significant change, the pace of movement should be changed, which can be achieved by continuous concentration or by delaying of individual phases of movement. Thus, in some sections of the action animation is faster, in others slower, which helps achieve certain smoothness and more realistic movements.

Timing
By timing we understand the time handling and management, the timing between individual scenes, sequences, shots, and also gestures. It also determines the rhythm of animation. It is said that the most used animator aids are the stopwatch and mirror. Even though we live in the era when we can search and replay almost any movement in the form of a video, but to "replay" the movement in front of the mirror while estimating the time needed remains the easiest and perhaps the fastest option. Moreover, the animator can give the movement much needed spirit.

Centre of gravity
Each object's movement is based on the centre of gravity, so animators should be clear about where exactly it is placed, and during game creation should control the weight distribution in relation to the centre of gravity, so that it corresponds with reality, unless they deliberately want to violate it as part of the game.

Principles of animation

Exaggeration
It is usually associated with hyperbole, deliberate exaggeration of movement, and expression of gestures and emotions. However, it is more of a caricature than an exaggerated deformation of movements or objects that may in fact seem almost forceful. On the other hand, if we displayed objects purely mechanically and without any exaggeration, they could appear stiff and inanimate.

Squash and stretch
It uses the deformation of objects that may not be possible in the real world. By enhancing the contrast between the extremes of tension and relaxation, we can achieve greater movement dynamics. It is used for both inanimate objects, for example a bouncing ball, and animation of a human figure and face.

Staging
It tries to make the communication as clear as possible, in which case it uses simple laws. For example, it makes use of the fact that a viewer is able to focus his/her attention only on one object or action at a time, and therefore it makes no sense to distract the viewer with more elements. Clear arrangement is especially influenced by the composition, that is, the placement of objects in the stage, but also, for example, by the angle under which acting characters face the camera. For example, the dialogue uses a three-quarter rotation of the characters toward the camera, not just the turning toward each other.

Anticipation
Any action in animation should not take place without certain "preparation", i.e. a short activity immediately preceding the action. For example, a character who is about to break into a fast run, pulls back in the opposite direction for a moment, and then sets out, etc. The audience is thus able to prepare for an action and then notice it more easily. The rule here is that the more important the actual action is, the more important the preceding movement should be.

Straight ahead and pose to pose animation
If an animator works spontaneously and creates the frame by frame animation, both the dynamic and experimental form of animation arises, which is suitable especially with certain animation techniques such as pixilation (motion images of real objects, people), cut-out animation, etc. In the case of pose to pose animation, the animator draws the key phases first, and then filling in the less important ones between them. This technique allows a more accurate planning and timing of the action, composition, and placement of the animation elements.

Follow through and overlapping action

It is not natural for a movement to stop precisely, suddenly, but it should happen rather more gradually. For example, after landing, the character stretches and swings his body a few times before settling. Likewise, there is oscillation damping after stopping even in case of props, such as hair, cloak, tail or ears of animals, and so on. If the object changes the direction of movement, its loosely attached parts follow the original direction and take some time to adjust to the new direction (flag waving, whip cracking).

Arc principle

Animation will tend to look more natural when the movement follows an implied arc *(circle)*. The straight trajectory appears unnatural. The exception is the movement of mechanical objects. In the case of animation of characters, limbs and such, the principle of arc is almost always used.

Secondary animation/action

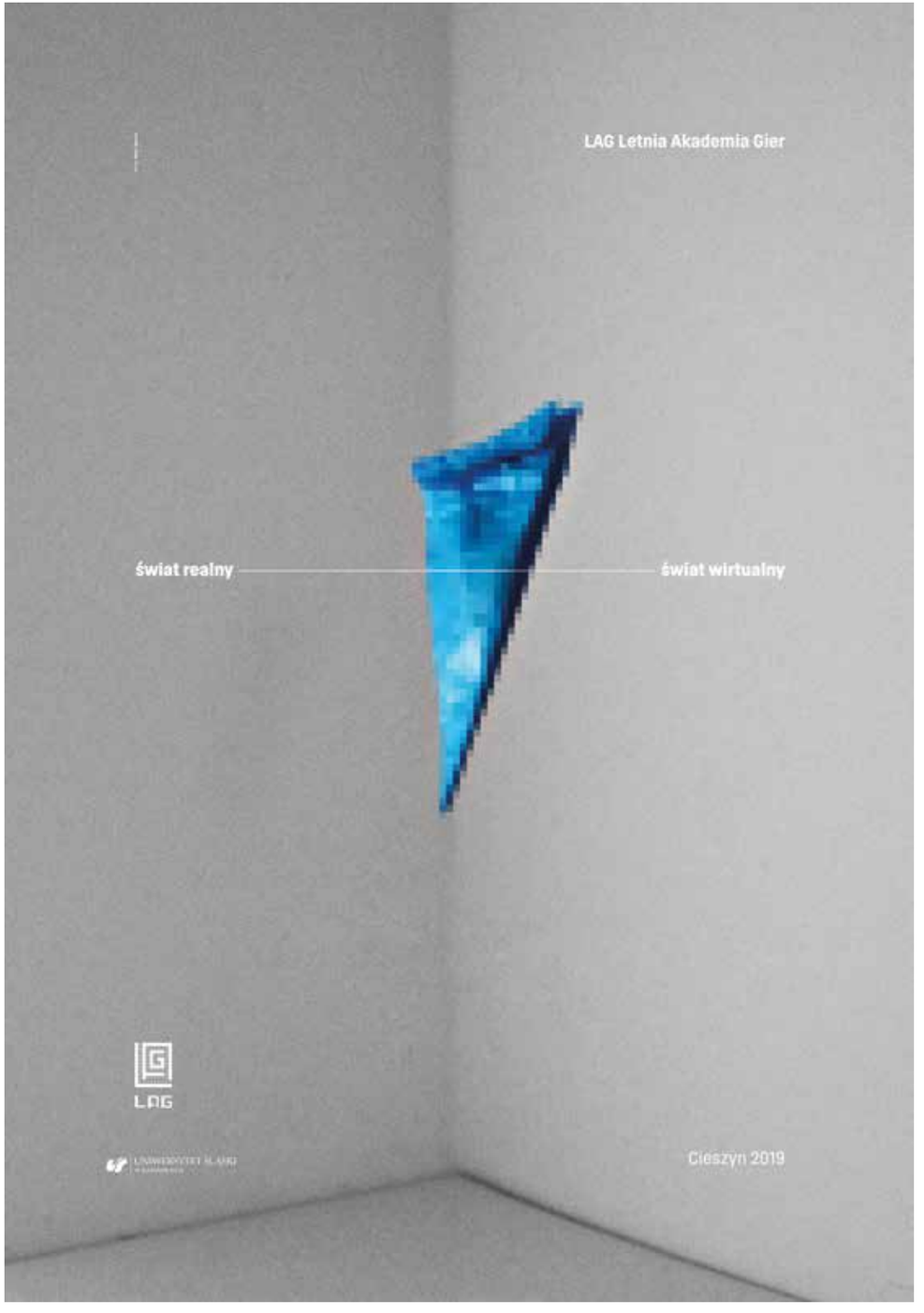
It builds on and extends the main animation. For example, a character may toss a prop or move his head while walking, looking around, whistling, and so on.

Solid drawing

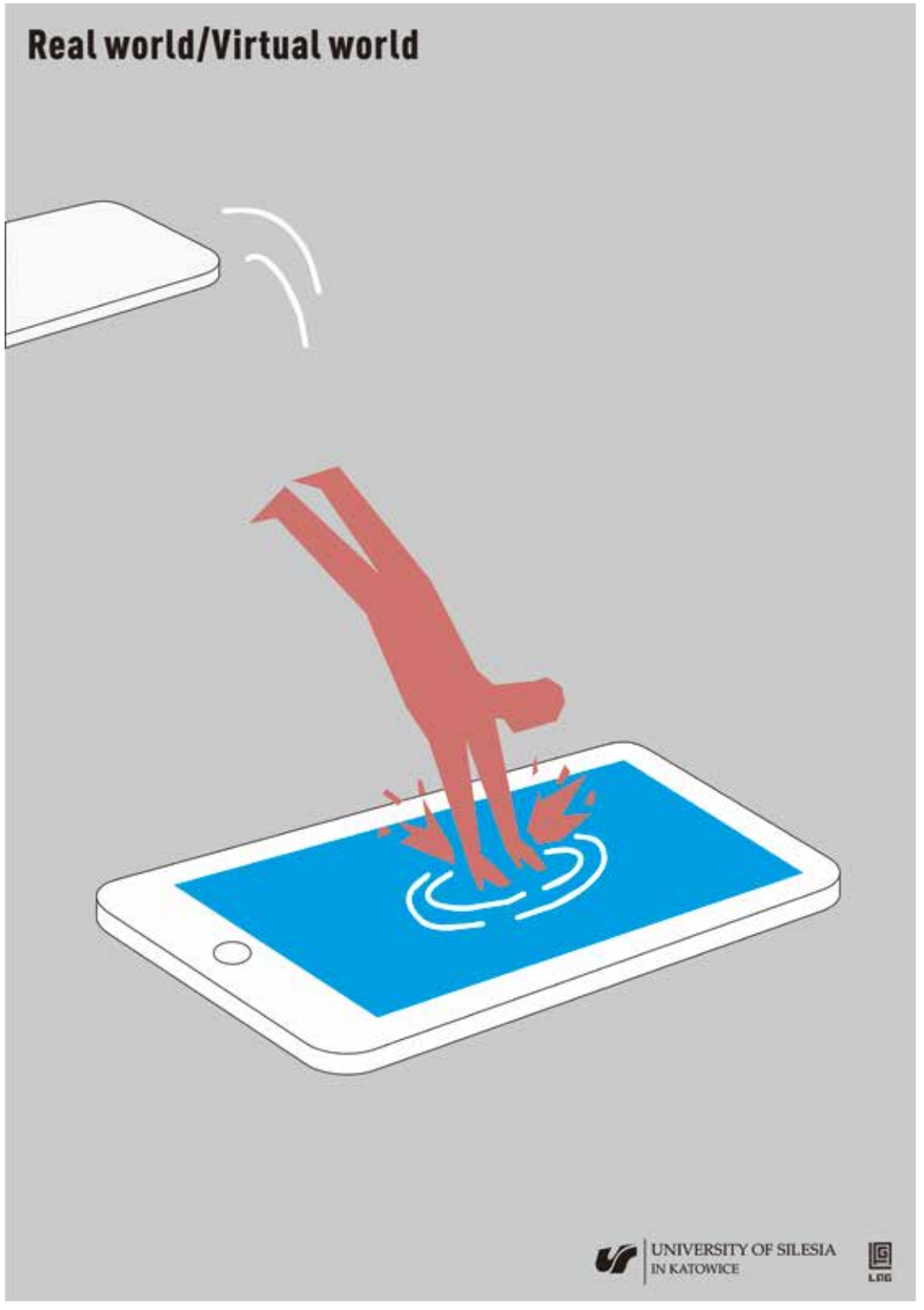
It allows the animator to naturally capture and design his concept of form, gesture, expression, but also space and movement. Developing drawing skills extends animators' artistic perception and refines the sense of graphic design, the sense of composition. The drawing should therefore form the basis of any animation work, including 3D animation.

Appeal

It is a feature or rather an added value that acts as a hook which attracts the audience and captures their attention. Art does not necessarily have to be pleasing or beautiful in the general sense. Messy, rough or otherwise provocative adaptation can also be captivating. Hence, it is more connected with the spirit and courage to express our vision as we feel, and at the same time in a way to achieve the best possible delivery of our intent.



LAG Festival 2019 – *FINALISTS of the Poster Competition*
Peter Javorik, SK



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Elements of the environment as a pretext to design a game world and its characters

"Panta rhei kai ouden menei" (Greek)
"Everything flows and nothing remains still."
Heraclitus of Ephesus

When we design specific levels or the personalities of characters in a game or when we investigate various artistic problems related to a given project and create different graphic concepts, we always wonder what effect should be produced and where we should look for inspiration. When we work in concept teams or with students, we always look for new creative and interesting solutions and visual interpretations, so it is easy to notice that this process is not uniform and can still serve as the subject of analyses and research. After some time, we begin to have many questions about methods or rules which could help creators come up with a unique environment, characters and the artistic layer of the game. It happens especially when we have to deal with the interpretation of a new notion, problem or subject determined by external factors or resulting from the specific character of a given project. Obviously, such issues have already been the subject of literature listed at the end of this article. Even though creative activity is not a new phenomenon, the rapid development of games which we are currently witnessing and the artistic output created in its wake may serve as an interesting research subject and supplement the literature devoted to creative activity and imagination.

This article describes an exercise which I was inspired to prepare by the famous quote from Heraclitus. I used the exercise in my work with students majoring in game design. It is related to a practical method of developing creative imagination and looking for inspirations and aimed at students who will seek jobs in the game development industry in the future. The exercise is a result of many years of working on game development as a conceptual artist and art director, when my main task was to make visual layers, that is the building blocks of video games, more cohesive, so that they constitute an integral whole along with the gameplay layer, AI and the story told in the game. It is also the result of studying the literature of the subject and of my teaching practice, which consists in preparing students to take the first steps in this new and

rather difficult industry. It is difficult because in most cases the final product is the result of work done in various departments and by a number of different professionals including producers, managers, designers, programmers, animators, screenwriters, 3D and 2D graphic designers, level designers, composers, etc. It is very rarely just one person's work, though I cannot deny
that there have been very successful games created by one just one author. It is not hard to conclude that the planned flow of information, communication and the fluidity of the production process are important or maybe even the most important factors which affect the end result and the quality of the final product. The balance between what is important as a whole and what is necessary as an element of the whole generates many problems which have to be tackled every day throughout the entire game development process. Regardless of whether the game is developed by a team made up of a few hundred people or by just one person, most problems depend on the scale of the project and are related to the specific nature of this industry and the constantly growing market demand. In the bigger picture, it is important to keep the concept in check, which is only possible when we know the essence of this concept, or, generally speaking, when we know the basis for the idea behind the game and the central motif of the story. In other words, we need to ask ourselves what constitutes the core and how individual elements are related to it in order to clearly express a coherent idea in the end. Obviously, as practitioners, we know that this is just one side of the coin. The other is the answer to the question of how we can creatively come up with and develop ideas, both as individuals and as teams, when there are so many dynamically changing themes, interpretations and problems? As time goes by, every creator gains experience and develops their skills and working methods. This is why the method described by me is just another drop in the ocean of this complex process. Its aim is to help release the potential of imagination which lies in wait inside everyone of us.

As creators gain experience in the course of their careers, it is not difficult to notice that not every subject is equally dear to them. Some are comfortable creating fictional or fantastic worlds and characters, others prefer "realistic" depictions, still others like the cartoon style. When the IP changes, individual specialists or even entire teams start migrating due to the specific character of the new brand. The formation of a new team begins. Even though it is a natural process, I often wondered whether it was absolutely necessary when the only reason behind it was the theme of the new game. Apart from excellent artistic skills, the specific nature of this industry requires artists to be able to compromise and be flexible. It obviously expands the range of competences required in this job market.

We all know the famous statement by Heraclitus which refers to the changeability of all things. As it is particularly meaningful to me personally, I would like to show how this context has become the core of further interpretations and practical applications. The above refers in particular to developing storyboards and implementing these assumptions when we design the environment and characters, thus creating new interesting concepts of the world of a given game. When we treat the motto "Everything flows and nothing remains still" as our point of departure, we can conclude that if Heraclitus was right, then: Something is happening all the time. We are always doing something. Even when we think that we are still. Moreover, as we look around, we notice elements in our environment which have a reason to be where they are. Therefore, it is not only true that "everything flows" but also that along with this current, it can unfold its own story, even if it is very simple, banal or prosaic. The awareness of this motion is extremely useful when developing a fluid sequence in the storyboard, but not only then. When we apply this context to other tasks, such as designing characters or the environment in the game, we can try to follow this train of thought and assume that **everything can be a story**.

When we perceive the creation of games as the creation of a story in a broader context, we can notice numerous interdependencies which affect each other and have an influence on the player's perception of the story as a believable whole which either makes it possible for a person to immerse him or herself in the created world or not. Some stories only supplement this whole, such as mini-games inside the main game, whereas others are fragments of stories within another narrative (such as quests, that is side tasks which are often featured in RPGs). We also know that every story has its beginning.

All right, but what does it have to do with creating concept art?

I have already mentioned the beginning of every story. If we accept that everything has a certain story, it follows that every element around us, even the smallest one, can become a pretext, pastime, introduction or exercise used to test the fluidity and flexibility of our own imagination. This beginning can also become the foundation of our own interpretation and the world of the game. When we are inspired by a chosen element and use it to create a story, we can change our attitude towards the mundane and look at our own works as a whole, noticing individual elements and trying to face the challenge which is at the same time a confrontation with our own capabilities.

Why is it so important?

In this way, we can avoid our own projections, we do not have to present ourselves as authorities because of the role we play: as educators or art directors. We can be just guides and make it possible for our students' conceptual curiosity to wake up. This is when students begin to see the artistic potential within themselves and start looking for justifications of their own project decisions. They slowly begin to understand the differences between the artistic destination and the path that leads to it. Students also observe how "something is seemingly formed out of nothing". But let us get back to the point.

How can we carry out such an exercise? We need to be aware of every person's diversity and the multitude of thinking systems. They are not the subject of this article, but at the same time they proved to be helpful in developing the tasks, which needs to be emphasized as well. For the record, I am going to list some of them: deduction, induction, divergent thinking, convergent thinking and atomic formula thinking. But let's get back to the exercise, which is really simple. We need to remember that when we come up with any concept, we are at the same time forming the construct of our story, so in fact, we are building the context and looking for analogies to it. The creation of a story can be broken down to asking a set of questions. The most important ones that we should take into consideration and often ask ourselves as the story progresses are: "What for?" and "Why?" I am going to try to illustrate what I mean with one of the tasks, in which an object served as a pretext to design a world and characters in a game in accordance with guidelines. Therefore, as I have already mentioned above, it became the core of various concepts created by students. The theme was a tower. Below, I present an example description: The task for students in their final year of master studies used during classes in designing game characters and environment:

The main task is to submit an artistic project (a presentation that is clearly understood) on the following subject: THE HISTORY OF THE TOWER AND THE FATE OF ITS RESIDENTS. It is a story which requires using imagination driven by creativity and answering a number of questions while holding on to a set of accepted assumptions. The end result should be a comprehensive ART GUIDE which constitutes a complete study of the presented subject, that is the space and characters included in it as an integral whole, which will prove that the chosen artistic direction is coherent.

In order to develop such a guide, it is possible to adopt the convention of devising a COMPENDIUM OF KNOWLEDGE. The structure should include general information on the high-concept level. Elements of the low-concept level (top-down approach) should be developed as part of individual immersion into the created world and also through iterations.

I. Environment:

Task description:

1. The concept theme of the class is a TOWER. As you assume the role of an explorer...
2. Answer general questions (high-concept):
   – What kind of world is it, in what reality is the tower located? (total plan, detailed plan, art work, emotion concepts)
   – What is this tower, what does it look like on the outside and on the inside?
   – Why is it there, what used to be its role and what is it now?
   – What was its story over time? (storyboard)
   – What makes it unique within the created world?
3. More detailed questions (low-concept):
   – Where does it stand, in what surroundings?
   – What is it built of? (design drawings)
   – What did subsequent construction stages look like, how did its structure change?
   – How high is it, is there a key that could be used to separate its individual levels (e.g. construction stages, characteristic architectural details)?
   – What do individual rooms inside the tower look like? (examples)
   – ...etc.

II. Character Design:

Task description:

1. The main concept theme are the "RESIDENTS OF THE TOWER". As you assume the role or a researcher who is observing the creatures living in the tower focus on at least three types of creatures/residents from a behavioural point of view so that you can single out at least three types of characters/creatures and one special protagonist, with specific characteristics and attributes.
2. Answer general questions (high-concept):
   – Who (or what) built this tower?
   – Who are the residents of the tower?
   – One of the characters living inside the tower is special, has a characteristic look and specific features. What does this creature look like? Why does it deserve special attention?
   – What role do the residents play?
   – Where did the current residents of the tower come from, have they

been there for a long time, is it the next generation or maybe an influx of newcomers?
– Is anyone in charge of the tower?
– ...etc.

3. More detailed questions (low-concept):
   – How were the residents characterized, what principles of division were adopted (appearance, functions, distinctive features, etc.)? A detailed depiction of the residents' everyday lives.
   – What interactions are there between the residents? (storyboard)
   – What do the detailed elements of individual residents' surroundings look like?
   – ...etc.

III. Course of action:

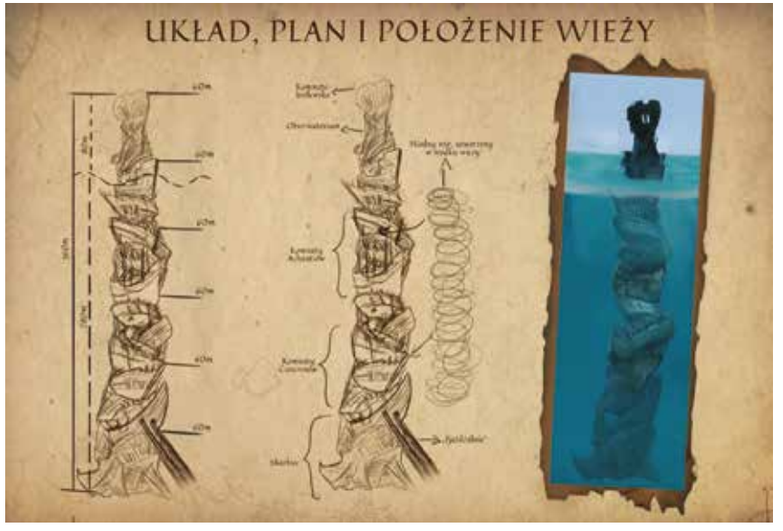
1. Introduction.
   Interpretation of the theme.
   Looking for inspirations, references, initial sketches.
2. Plan and the main axis of the concept.
   Planning and selecting the means of expression (sketches, storyboards, models, renders, etc.).
   Short general description of the world serving as the background for the TOWER and its RESIDENTS (an outline of the context, climate, environment, etc.) Separating the main theme as the foundation which binds the environment, architectural elements and characters into a single thought, giving credibility to the created reality.
3. Accuracy of details.
   Depending on the degree of influence which a given element has on the whole depiction, it is not always necessary to render everything in detail. In the first stage, it is necessary to focus on the most important element on which the ART GUIDE is based (top-down approach).
   The elements which need to be elaborated in detail on the low-concept level should have a supplementary role and function as the background.
4. Composition and division of the outline.
   Depending on individual assumptions, the layout of the presentation can be chosen freely, the only important thing to note is that it needs to constitute a coherent whole and contain the elements of high and low concept.

IV. Art guide – Guidelines

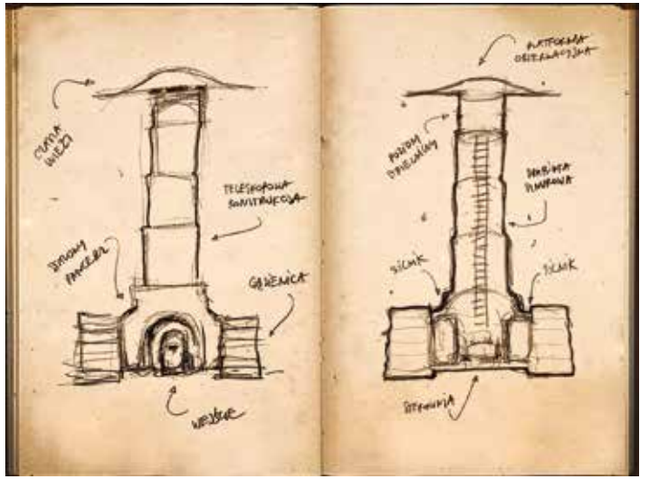
The main task is to submit an artistic project (a presentation that is clearly understood) on the following subject: THE HISTORY OF THE TOWER AND THE FATE OF ITS RESIDENTS
The story of the TOWER is a pretext to present a coherent concept of the created reality. It concerns both its content and visual side.
In total, the guide should contain at least 20 boards + table of contents (10 for the environment, 10 for the characters) + one storyboard for characters and one for the environment
The guide should contain the following elements:

- title, a suitable font
- each board should be described so that it is clear what it shows
- general introductory description of the world (a few sentences) with concepts
- environment sketches to outline the context of the place in which the tower is located
- sample table of contents:
  1. The tower now
  2. The history of the tower
  3. The function of the tower
  4. Elements of the architectural detail and material
  5. Individual floors (e.g. design drawings)
  6. Special places (artwork, elaborate illustration)
  7. etc...
- Residents of the tower, Bestiary
  1. Residents (in general)
  2. The history of their arrival, e.g. a storyboard for one of the groups
  3. Administrator/Keyholder/Guardian (the most important character)
  4. The role, function or history of the protagonist
  5. The antagonist (a short background of the conflict/argument, e.g. a storyboard)
  6. Daily activities of residents

Below, I present a few examples of students' projects:



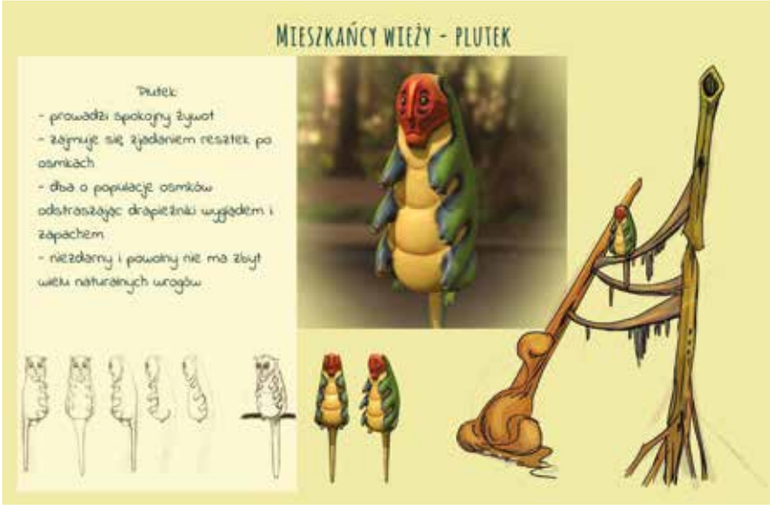
Gadowska Martyna, "The Tower of the Sea King" (excerpt)



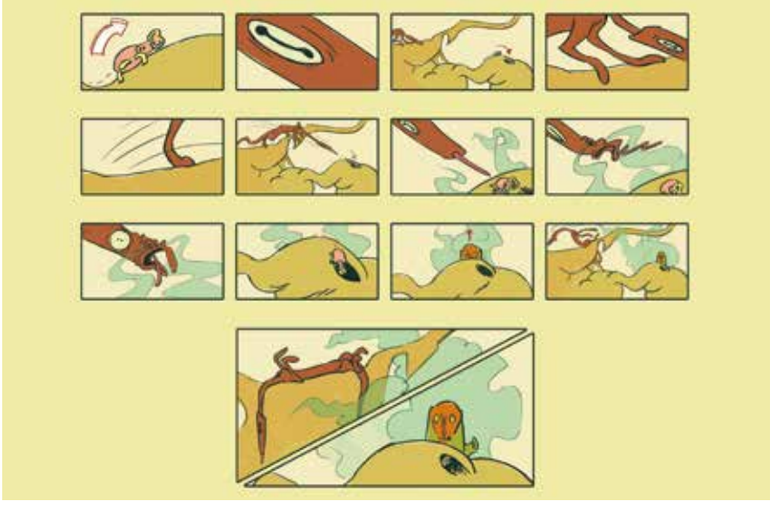
Wojciech Wilsz "The Tower of the Monster Hunters", a cross-section of the tower as a fortress and vehicle used by the hunters (excerpt)

Wojciech Wilsz "The Tower of the Monster Hunters", one of the adventures described in a journal (excerpt)

Maura Filipkowska "Tower...", a concept tower as an element of a specific ecosystem (excerpt)



Maura Filipkowska "Tower...", one of the residents of the tower (excerpt)



Maura Filipkowska "Tower...", a storyboard presenting relationships between the residents of the tower (excerpt)

Obviously, the description of the above method based on the tower is just one idea of how you could guide students and encourage them to get down to creative work. The description or the task not always needs to be so detailed. However, we need to bear in mind that the better a given task is described, the easier it is for the students to understand and handle it. Due to the limited framework, I could only present here a small fragment of how we can use a story of any object as a pretext to develop the students' creative potential. Another useful example is a fragment of a different task description for final year students, used for the purpose of classes in character and storyboard design:

Storyboards and concepts are based on a chosen organic motif. The task is to develop side plots and descriptions, as well as to enrich and supplement the characteristics of the creature that was created and called into being.

I. Storyboards presenting the genesis of a chosen plant form. Storyboard presenting the transformation of a living being into a mutagen The story needs to be told on the basis of three analogous themes:

1. The origin of the Creature as a result of supernatural events.
2. The origin of the Creature as a result of an experiment carried out by a mad scientist.
3. The origin of the Creature as a result of a combination of different events in the process of evolution. This evolution (as well as the evolution of other beings) takes place on a faraway planet. Perhaps in a faraway, unknown reality with incredible physical characteristics.
4. Moreover, each theme needs to have an outline of the environment in which these creatures exist. It can be the background of the scene of action, a separate element used in storyboards, an illustration, a mood concept, or an artwork for the three analogous situations described above.

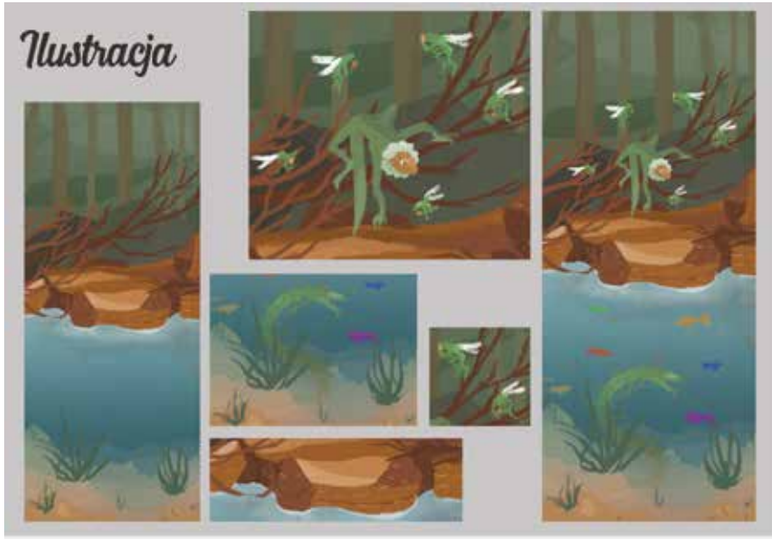
II. The creatures' adaptation to the environment. How individual creatures deal with the environment (camouflage etc.).

III. Character design based on specific organic forms implemented in the studio in cooperation with prof. Małgorzata Łuszczak.
Developing side plots and descriptions, as well as enriching and supplementing the characteristics of the character that was created and called into being.

1. Concept drawings – drawings based on a chosen plant motif
2. Looking for components which will serve as the foundation for the designed creatures and the protagonist
3. Selecting drawings as a collection of base concepts for characters

4. Iteration of three selected types of creatures
5. Illustration in the context of an attribute
6. The creatures' adaptation to the environment
7. Natural antagonists/opposites

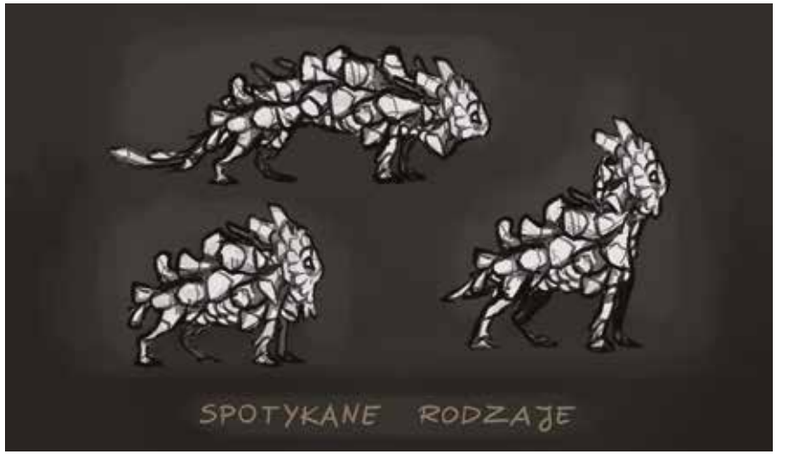
Below, I present a few examples of the above mentioned projects:



Samborska Agata, excerpt from presentation, the environment of creatures inspired by plants

Leńczuk Anna, a fragment of a presentation where the inspiration was the heart

Maszloch Izabela, excerpt from presentation, depiction of imaginary creatures based on cones



Maszloch Izabela, excerpt from presentation, depiction of imaginary creatures based on cones

Tabaczkiewicz Anita, excerpt from presentation, one of many embodiments of cabbage

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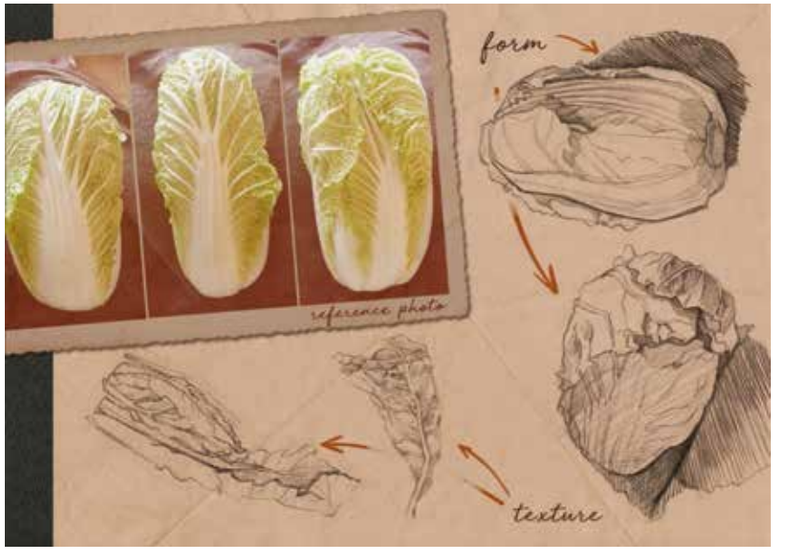

Tabaczkiewicz Anita, excerpt from presentation, one of many embodiments of cabbage

To sum up, in the above article I attempted at presenting a slightly different view on typical problems faced by people studying game design on a daily basis. It is just an example of how we can inspire creativity and break out of the routine, as well as win attention, even though it is hard to compete for, considering the multitude of digital images on the Internet. We are aware of it because as creators, we also have to fight for the attention of our students. It is surely a mere introduction to a further, detailed and reliable research, required on these subjects. However, the number of diverse projects and their results seem to be very promising, which encourages reflection and invites us to delve deeper into the issue. Actually, this is exactly what I wish to encourage my readers to do.

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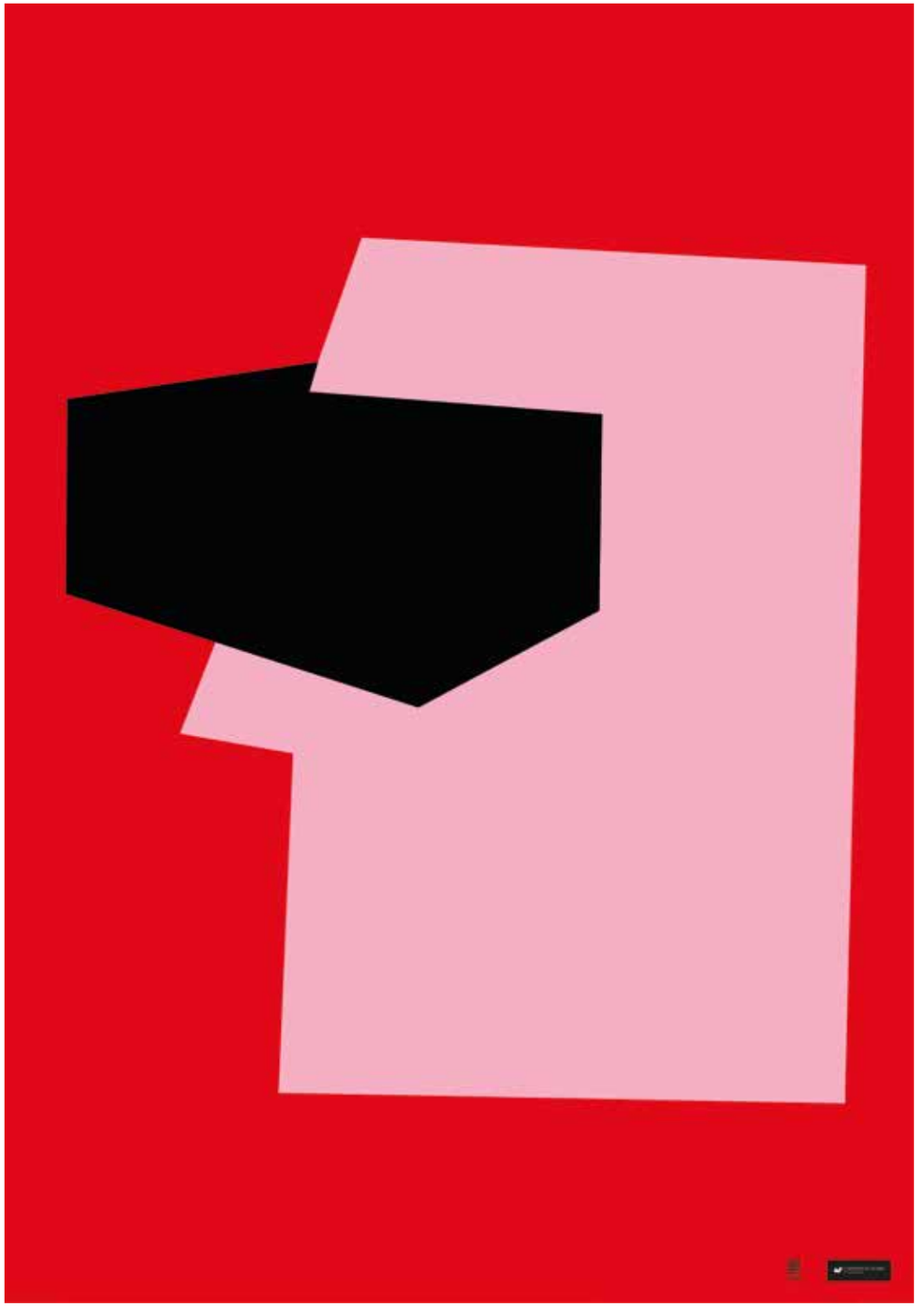

LAG Festival 2019 – *FINALISTS of the Poster Competition*
Piotr Depta-Kleśta, PL

Beata Piecha-van Schagen
Coal Mining Museum in Zabrze, Poland
Victor van Schagen
Coal Power Games, Germany

Games as a medium for the preservation and spreading of Intangible Cultural Heritage

Intangible Cultural Heritage (ICH) encompasses the various customs, expressions and collective knowledge, as well as any objects and cultural spaces connected with them, recognised by specific groups of people as part of their cultural heritage. As it is strongly bonded with people, intangible heritage is in fact vulnerable and sensitive to the changes of the factors on which it depends. Globalisation, environmental changes, the exaggerated influence of politics are some of the most dangerous for the liveliness of the intangible heritage. For this purpose UNESCO has prepared a tool for supporting and protecting the ICH: the Convention for the Safeguarding of Intangible Cultural Heritage[1].

Dangers facing heritage

In many cases the trans-generational transfer is challenging and the heritage passes with its stewards. The youngest members of the local communities find the practices outdated and unsuitable for a teenagers' lifestyle. Also the atrophy of the space to which the intangible heritage belongs, lessens the security. Both the urban space as much as the rural environment require sustainability to remain bonded with the rituals, beliefs and practices[2].

One of the most characteristic celebrations for Upper Silesia is the Saint Barbara's Day (Barbórka), the annual celebration, practised since the 1880s on the 4th of December, by the Upper Silesian coal miners. It consists of the religious and festive elements, and is still vivid in spite of the above mentioned difficulties that endanger the ICH of the Upper Silesian coal miners. The decline of the mining industry causes a decrease in the amount of coal miners. Of the 388.000 employed in 1990, in 2018 only 83.000 were left working in Polish

1 UNESCO, Lists of intangible cultural heritage and Register of best safeguarding practices, 2003.

2 The Intangible Cultural Heritage Register contains the phenomena such as falconry (practised in 18 countries), the Mediterranean diet as well as the reggae music of Jamaica.

mines[3] (the majority of which are placed in Upper Silesia). The strength and natural abilities of the industry labourers of transferring the heritage to the following generations is weakening. The St Barbara's celebration is also strongly bonded with the urban space of Upper Silesia, which is gradually losing its industrial character. Of 70 coal mines working in the 1970s in Upper Silesia barely 12 are left, so the natural environment for practising the intangible heritage is gradually vanishing. Yet, young miners many express a desire for this supernatural protection, by placing pictures of the Patron Saint close to their working space and even tattooing the image of St Barbara on their bodies[4].

The Upper Silesian miners' heritage connected to the figure of St Barbara derives from the strong belief in the Patron's supernatural support. Although the meaning of the support itself has evolved[5], the belief is still very strong; both among the miners excavating the coal and the white collar workers.

3 M. Tkocz, *Efekty restrukturyzacji górnictwa węgla kamiennego w Polsce*, „Prace Komisji Geografii Przemysłu" 2006, No. 9, pp. 31–36.

4 The Art Academy in Katowice and the Coal Mining Museum are conducting the science-art project researching and documenting the regional (Upper Silesian) and miners' iconosphere themed tattoo. The exhibition of black and white photos and a publication with anthropological commentary will be published in 2020.

5 B. Piecha-van Schagen, *Kult świętej Barbary wśród górników kopalń węgla kamiennego na Górnym Śląsku w XIX i XX w. Tom 1*, Zabrze 2018, pp. 614–669.

The first group experiences the fear of methane explosions and the unexpected motions of the stone mass. The managers and supervisors, on the other hand, bear the gravity of the responsibility for the health and lives of their colleagues. Anxiety and obligations are a big part of coal mine workers' everyday reality. That is why most of them, even non-religious, recognise Saint Barbara as the part of the miners' heritage[6], and those of Catholic faith deeply believe that their Patron will rescue them from real danger[7]. The celebration of Saint Barbara's Day is the thanksgiving act performed by those who have safely survived another year working in the mine. The power of the Upper Silesian miners' intangible heritage comes from the fact that this consideration was being passed among the labourers from generation to generation from the 80s of the 19th century.

The Coal Mining Museum in Zabrze, the biggest cultural institution in Upper Silesia that protects and administers the post-industrial heritage, was challenged last year by a group of coal miners to elevate the Barbórka celebration by listing it on the Polish Intangible Cultural Heritage List[8]. In this way the museum, specialising in protecting the tangible heritage, stepped into a new area of activity. By supporting the coal miners with the necessary formal preparations, the museum employees learned that the biggest fear of these miners, as the stewards of the Barbórka celebration, was the clear danger of Barbórka being erased from the local social memory.

The ICH UNESCO Convention supports endangered intangible heritage by promoting the idea of "best practices" – actions taken by stewards, state parties and cultural institutions for its protection. Therefore the Coal Mining Museum decided to exploit both the value and bonding power of the miners' intangible heritage, with mutual agreement and in cooperation with the Barbórka stewards. The goal is to gain a new tool for raising awareness of the importance of intangible heritage at local, national and international levels and and making the public conscious of the need to safeguard it.

Scientists and authorities worldwide have noticed the necessity to raise the awareness of the intangible side of the local cultural heritage, and to support its stewards: "knowledge transfer and education programs that use tradition bearers 'living treasures', artists and performers are all-important for promoting

6 Por. Cezary Kasperek, miner, born 1947 in: B. Piecha-van Schagen, *Zwyczaje religijne. Górnicy i ich patronka, Narracje górnicze z terenu Zabrza*, ed. B. Linek, Zabrze 2016, pp. 259–260.

7 B. Piecha-van Schagen, *Zwyczaje religijne. Górnicy i ich patronka...*, pp. 263–264.

8 The appliance got mutual agreement of the Barbórka stewards during the meeting organised in Coal Mining Museum in Zabrze April 21th 2018. Barbórka got officially listed in July 2018.

the continuity of intangible cultural heritage"[9]. For this purpose they started the effort of inventing a spectrum of modern tools to support the endangered transfers. "Along this line, nowadays, most EU countries have promulgated specific educational policies and recommendations encouraging schools to sustain and promote awareness of local cultures and heritage."[10] Also many countries have promoted Technology Enhanced Learning (TEL) for promoting the heritage. The use of digital technologies for teaching and learning about the cultural heritage seems to be one of the biggest contemporary challenges for authorities, stewards and cultural institutions. TEL improves the educational standards and quality, but does not exhaust all of the possibilities given by modern technologies which could be used for sustaining the ICH. TEL, accompanied by computer games, could be used to build a stronger awareness of heritage. The Coal Mining Museum chose the "gaming path" as the tool most attractive for stewards, for the younger generation (children and teenagers) to play with the intangible heritage.

The Challenge

To support and encourage the development of ICH games, there are certain questions which need to be answered. First of all, is it a suitable medium? It compares to other media quite well. Accessibility is very good; modern technology has advanced enough to make powerful mobile devices ubiquitous. 5.1 billion people, (66,53 % of the world population) have got mobile phones[11]. People of all ages have, or are familiar with, mobile devices and know how to use them. Games are also becoming more familiar as a medium: 2.4 billion people (31.11% of the world population) are playing games in 2019.[12]. The production possibilities of this medium are also very wide. Games do not have to be printed, like a book or a journal. They are easily found online; dependable distribution networks are already in place, and downloading games can be done at the touch of a button.

9 F.M. Dagnino, M. Ott, F. Pozzi, *Addressing Key Challenges in Intangible Cultural Heritage Education*, 2015, online [available https://pdfs.semanticscholar.org/76c8/71cd97fec7a9a5f090981fcc4c9873db0ffd.pdf]

10 H. Du Cross, *Intangible Heritage, Education and Museums, UNESCO Observatory PLCCE*, 2012, online [available https://www.academia.edu/12317185/Intangible_Cultural_Heritage_Education_and_Museums]

11 GSMA Intelligence, *How Many Phones Are In The world?*, online [available https://www.bankmycell.com/bloghow-many-phones-are-in-the-world].

12 D. Takahashi, Newzoo: *2.4 billion people will game in 2019, thanks to mobile*, 2019, online [available https://venturebeat.com/2019/03/05/newzoo-2-4-billion-people-will-game-in-2019-thanks-to-mobile/].

Secondly, are games a unique enough medium? We believe that time has proven this to be the case. The wordless interactivity of the games has the ability to transcend international barriers and it is a medium that requires active engagement, not a passive absorption of the information. This interaction enhances the experience and the retention of information. "Intangible heritage is by definition people-oriented rather than object-centered"[13]. Intangible cultural heritage is a shared experience. It is social and dynamic; interaction is key. This aspect makes games a very suitable medium[14].

Finally, what are the unique challenges of integrating ICH within a game? To represent certain elements of ICH in a game, it is important to know what category they might belong to: beliefs, customs or oral heritage, to name some examples. In **Saint Barbara: Miner Rescue**[15], the first game currently being developed by Coal Power Games, and made in cooperation with the Coal Mining Museum in Zabrze, the topic is the patron saint of coal miners, Saint Barbara, as an essential part of coal mining culture and the popular belief that she rescues miners during mining disasters.

The game also includes local demonology (the creature Skarbnik ('The Treasurer') tries to lure miners away from Saint Barbara), and information about mining locations and equipment. Though the scope of the game is small, it is a deliberate effort to develop an ICH game, following guidelines set by UNESCO and Coal Power Games.

13 P.J. Boylan, *The Intangible Heritage: A Challenge and an Opportunity for museums and Museum, Professional Training*, in: "International Journal of Intangible Heritage", 2006, No. 1, pp. 54–65.

14 J. Majewski, *Playing with intangible heritage. Video game technology and procedural re-enactment,* in: Safeguarding Intangible Heritage: Practices and Politics, ed. N. Akagawa, L. Smith, London 2018, online [available https://www.academia.edu/37594294/Playing_with_intangible_heritage_Video_game_technology_and_procedural_re-enactment].

15 Coal Power Games, *Saint Barbara: Miner Rescue*, 2019.

Games have been used as educational tools for some time already, and they are widely accessible. Right now, someone may search the Internet, or browse any app store to find many games that, with varying degrees of success, can teach children or adults about a wide variety of subjects, such as biology, history, mathematics, etc. Also in education has the gamification of some course materials taken place: a maths course may be supplemented with online exercises presented as minigames, complete with fun animations and rewards. A student's progress can be tracked in real-time.

Games are also used as a training tool, allowing professionals in the army, rescue services and other types of services to safely train proper procedures and reactions that might be dangerous in real-life situations

The usefulness of games is also recognized in scientific research. Tough scientific problems may be solved with the help of crowdsourcing: by using a game as an interface between users and large amounts of data that needs to be analysed, it becomes possible to harness the brainpower of hundreds or thousands of players worldwide[16].

Historical and cultural heritage has been used in varying ways in games. These games may be categorized in 4 groups: commercial games, serious games, culture-centric games and mods[17].

Commercial games use historical and cultural heritage as useful sources for interesting settings or story elements. Recently, there has been an increasing appreciation for historical detail and accuracy. However, this attention to detail is often limited to tangible heritage – more oriented towards architecture and objects – while keeping the intangible cultural aspect subservient to the game experience.

The game **Shadow of the Tomb Raider**[18] included an 'Immersion mode' - the option to play with authentic Spanish or Yucatan Mayan. Another recent game, **Assassin's Creed: Origins**[19] featured a 'Discovery mode' which allowed players to follow guided tours within the game, complete with narration and photos. The goal of the developers of the game **Kingdom Come: Deliverance**[20] was historical accuracy to the highest degree. Unfortunately, the creators are

16 Coal Power Games, *Saint Barbara: Miner Rescue*, 2019.

17 University of Washington, *Foldit*, 2018, online [available https://fold.it/portal/info/about].

18 Square Enix, 2018.

19 Ubisoft, 2017.

20 Warhorse Studios, 2018.

to have failed on a cultural level[21]. Representing historical and cultural heritage in commercial games will remain a struggle, due to the conflicting goals of mass appeal and player experience versus cultural accuracy.

For serious games, such challenges are not as much of an issue. They serve a specific function, have a limited audience in mind and are used in specific, pedagogical environments. One such example is the project **Tactical Iraqi**, a game designed to teach soldiers not only the Iraqi language, but also conversation and behavioural customs to avoid offense[22]. Another example, **Virtual Warrane II – Sacred Tracks of the Gadigal**[23] is a game that was created for an exhibition in Sydney, and allowed players to experience that local area at a time before the city was built.

Culture-centric games have a clear cultural focus, and aim to treat this aspect respectfully, but still aim to be commercially successful. **Never Alone**[24], a platforming game where a young Iñupiat girl, together with a snow fox, sets out on an adventure to save her tribe, is a good example of this. This game was developed with the collaboration of the Alaskan Iñupiat community.

Mods, or 'modifications' may fall in any of the above categories, but their distinguishing feature is that they are built upon the existing games, and use existing features to varying degrees. They may share code and visual assets, or be completely custom-made except for the game engine used for the original game.

Suggested guidelines

ICH games are a new genre of games, and it is essential to establish a solid and comprehensive set of guidelines to ensure a smooth development process, to guarantee the willing participation of all involved parties, and to maximize the chances of critical success.

- **Game Design** for ICHG is, in a way, the reverse of traditional commercial game development. Instead of designing the game to fit the player's experience, game design must wholly support the cultural content of the game. This will help to create a connection between

21 A. Inderwildi, *Kingdom Come Deliverance's quest for historical accuracy is a fool's errand*, 2018, online [available https://www.rockpapershotgun.com/2018/03/05/kingdom-come-deliverance-historical-accuracy/]

22 W.L. Johnson, Serious use of a serious game for language learning, in: "International Journal of Artificial Intelligence in Education", 2010, No. 20 (2), pp. 175–195.

23 *Virtual Warrane II - Sacred Tracks of the Gadigal*, 2012.

24 E-line Media, *Never Alone* (Kisima Ingitchuna), 2014.

the player and the information, to create a synthesis. When the game design adjusts itself to the information that should be conveyed to the player, that information will come across more clearly, there should be less dissonance between the message and the medium, and should have an overall greater impact on the player, resulting in a more satisfying experience. To ensure the best possible experience, immersion and engagement are crucial. The game must also be developed with digital literacy and usability in mind. Interactions must be natural and logical and and they should support the information. A balance must be struck between mass appeal and cultural approach.

- **Technical** requirements also demand careful consideration. In order to properly support ICH game development, the hardware and software must fit the information that is shared in the game. Also various input methods (touch screen, controller, motion control, and other) will enhance the player's experience. Analysing methods of distribution and accessibility (browser, mobile app, museum exhibition) is important to reach the widest audience possible, just as publishing and marketing.
- Proper **organisation** is another key element for an appropriate development process. Recognition of all participating and credited groups is required: the developer, stewards, cultural institutions or state parties, including the ICH specialists and the publisher. An open communication structure between all parties (stewards <> developer <> audience) must be in place. As a part of that, the identification or creation of shared spaces for communication and sharing experiences (PAS; passionate affinity space[25]) must be possible to create a necessary platform for stewards to share their experiences.
- **Ethics** also need to be considered when developing games concerning both tangible and intangible cultural heritage. It is essential to work with full respect for the stewards' understanding of their heritage. ICH games are a medium for cultural exchange, and no aspect should be trivialized or commercialized. One must be aware of the cultural significance of any part of the cultural heritage portrayed and of the privacy of people concerned.

We believe that by developing ICH Games guided by the Convention for the Safeguarding of Intangible Cultural Heritage (2003) this goal could be reached. For this reason the Coal Mining Museum in Zabrze, the game studio Coal Power Games and the Barbórka stewards started a cooperation on ICH Games.

25 J.P. Gee, *Good Video Games + Good Learning*, New York 2013.

It is our intent to develop the idea of ICH Games as a new genre of games covering the intangible cultural heritage. The development of these games is to follow the UNESCO ICH Convention (raising awareness of the importance of intangible heritage at local, national and international levels and the need to safeguard it).

By means of cooperation between the game developer, intangible cultural heritage scholars and, most importantly, the stewards of intangible heritage(social memory), it could be possible to pass on the traditions, beliefs and cultural practices to further generations, as well as fulfilling educational goals. Games are a valuable new tool for the preservation and sharing of ICH[26]. More than the sum of their parts – text, sound and motion – games push beyond those boundaries: They allow players to actively participate in the experience of intangible cultural heritage. These interactions enhance the experience and retention of information. The depth of the idea of heritage, as well as the care and the detail of the information that can be shared, is much greater. More than games for entertainment or education, these games can have a lasting cultural impact. The social character of ICH Games gives hope that a stronger bond between the miners' community and the youngest generations will be created. This could be a result of the game creating process and fulfilment of the goal of ICH Games themselves. We also hope that the ICH Games will find a solid place in the field of museum education.

ICH Games therefore require a precise approach to game development and design: Close cooperation with the stewards of ICH is essential. The presented information comes first and gameplay decisions flow from that, the connection between information and the player is an essential element.

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26 T.T. Lipp, *Materializing the Immaterial: On the paradox of medializing intangible cultural heritage*, 2013, online [available https://www.researchgate.net/publication/322617661_Materializing_the_immaterial_On_the_paradox_of_medializing_intangible_cultural_heritage].

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LAG Festival 2018 – *FINALISTS of the Poster Competition*
Edyta Kurc, PL

Katarzyna Kroczek-Wasińska
University of Silesia in Katowice, Poland

Katarzyna Kroczek-Wasińska was born in 1979 in Olesno. In 2000, she began studies at the Faculty of Graphic Arts at the Academy of Fine Arts in Katowice. In 2005 she graduated with honors from the Academy. He works at the Faculty of Arts in Cieszyn, University of Silesia in Katowice and at the Secondary School of Applied Arts and Design in Tarnowskie Góry. She is interested in digital graphics and multimedia. She took part in ninety exhibitions in Poland and abroad (Belgium, China, France, USA, Mexico, South Korea, Lithuania, Macedonia, Germany, Russia, Italy) in research projects, workshops, conferences. She is an author of articles, winner of prizes and awards: Grand Prix at the Biennial of Miniature Digital Print, Plock 2007; award at the VII International Graphic Competition for Eks Libris, Gliwice 2007; equivalent prize 'Work of the Year 2006', Katowice 2007; Grand Prix at the International Exhibition of Graphic Arts in Minsk, 2008; award at the Biennial of Digital Print in Gdynia, 2008; Award of the Mayor of the city of Katowice, 2010; Scientific Award for outstanding doctoral thesis, Cieszyn 2010; distinction at II Digital Print Biennial in Gdynia, 2010.

LAG arena

Katarzyna Kroczek-Wasińska
University of Silesia in Katowice, Technical Director
of the LAG Festival, Poland

LAG ARENA was the event which inaugurated the four editions of LAG Festival of Art and Independent Games. It was aimed at students of secondary schools from Poland, the Czech Republic and Slovakia, interested in the creative processes involved in video game development. The competition consisted of three stages in which participants had to complete various tasks. Students could take part in the project individually or as a team of up to 5 people.

The winners received gifts and had the opportunity to present their projects on the stage of LAG Festival. They were also invited to take part in an international game design workshop organized by Game and Virtual Space Design at the Faculty of Fine Arts and Music of the University of Silesia in Cieszyn.

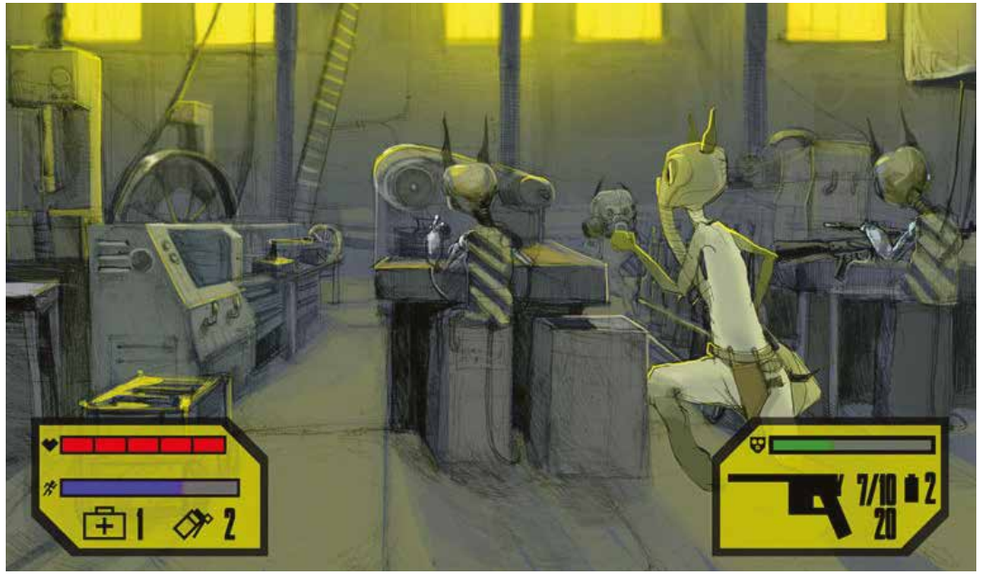
2016 competition laureate – Marta Makuszewska, "Midsummer Night" game design

What contributed to the popularity of LAG Arena competition was the fact that young people have a natural interest in game design. Young people, who were brought up on interactive entertainment, communicating with the virtual reality, and images generated with the help of digital tools, are a perfect reflection of our times. The universal digitization of the visual world today is not a solely the proliferation of digital images, which are created and programmed only with the help of digital tools. This has become an important characteristic of our culture and of the way in which people experience both culture and reality, using digital tools developed to process images. In games, we often fight contemporary demons, that is their exaggerated versions, or actual problems which we have to deal with in the real world and which we often struggle to solve. Games often comment on reality in a veiled way. They often feature monsters, zombies or cosmic epidemics to address a problem which is only too familiar and important to us.

2017 competition laureate – Karolina Ziółkowska, "Cieszynianka" game design

During the 4th edition of LAG Arena, we could see artistic maturity and the conscious use of the digital tool which has been growing year by year.

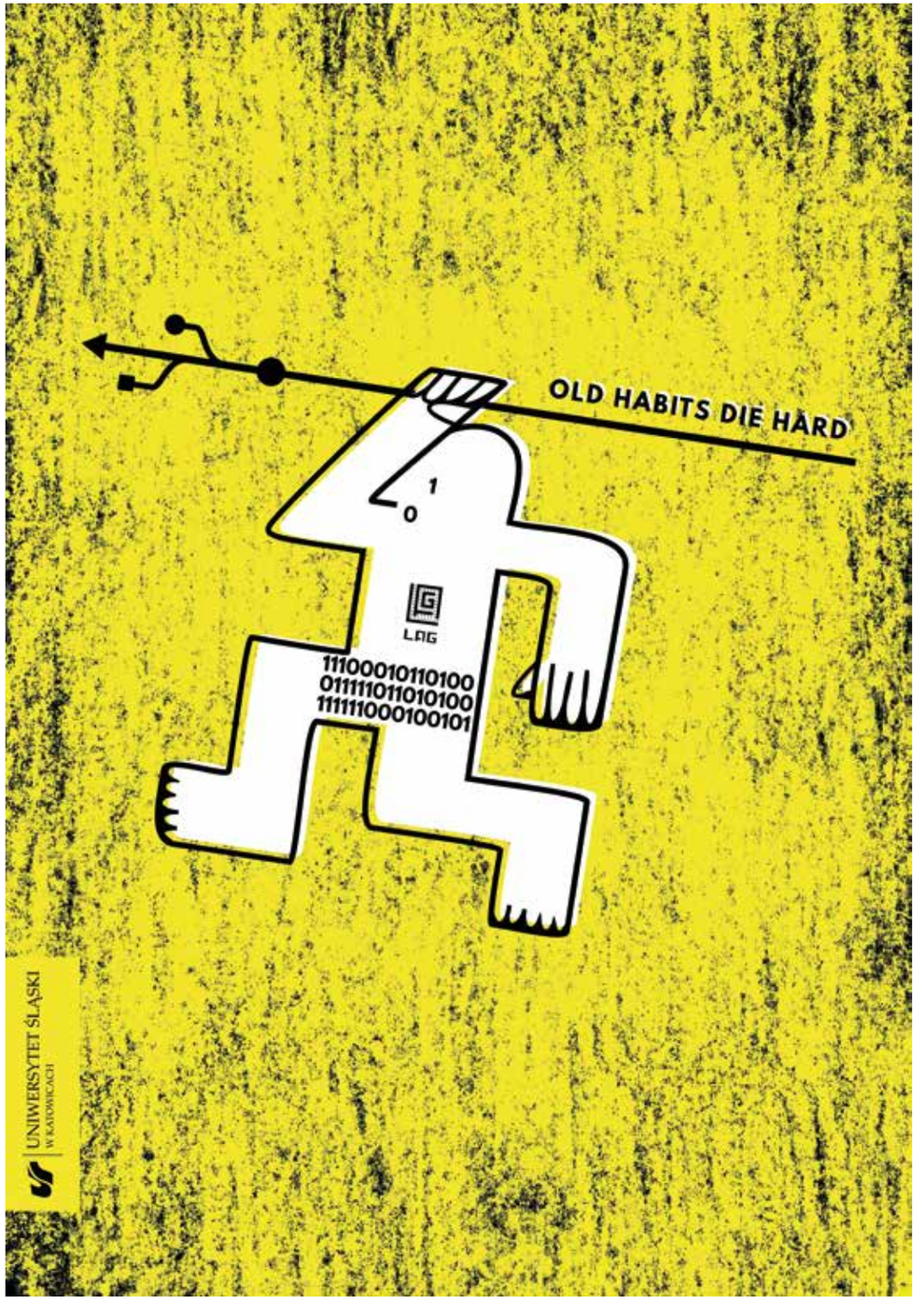
Sketches – Martyna Luranc



In 2018 the first prize went to a game entitled "Flavo" designed by Martyna Luranc

The digital tool also becomes an important means to translate reality. This is why it requires both technical skills and intellectual maturity. It translates analogue or real objects into the digital language which has its specific rules that are hard to master at the beginning. A young person receives these images, creates them, is present in them. He or she starts existing between two realities: digital reality and real life.

Apart from technical and artistic skills, we graciously awarded out-of-the-box thinking which departed from clichés that we often encounter in commercial games. This is one of the most important characteristics of the awarded projects.



In 2018 the first prize went to a game entitled "Wormgrower" designed by Michał Kolano

☞ LAG Festival 2019 – *SECOND PRIZE of the Poster Competition*
Weronika Fajerska, PL

LAG Festival 2018 – *FINALISTS of the Poster Competition*

Dawid Malek, PL

LAG edu

Małgorzata Łuszczak
University of Silesia in Katowice, Poland

The LAG EDU Conference is an international conference in which many experts from the computer games market, visual arts market and the new media participate. Over the four editions of the festival we enjoyed the opportunity of attending several dozen lectures by academics and by the creators of independent games as well as by the representatives of international video games corporations; The conference participants included art directors, music composers, creators of sound and programmers.

Our guests arrived from Mexico, the USA, Belgium, France, Cyprus, Japan, Portugal, Germany, Austria, The Czech Republic, Slovakia and Poland. The conferences were open to a large audience. The venue of the two editions was the Conference Centre of the University of Silesia, one took place in the National House at the Market Square and in the Performance and Sports Hall in Cieszyn.

Apart from the lectures, students could also attend workshops run by the experts thus being able to delve deeper into, and explore in practice, the issues mentioned during the lectures at the conference.

LAG Edu, 2018

2016

Experts

Marek Madej – Worked on one part of *The Witcher*
Marcin Przybyłowicz – Music director in *The Witcher 3: Wild Hunt*
Grzegorz Przybyś – Co-founder of the animation studio Division 48
Konrad Czernik – Art Director at Techland
Lukáš Najbrt – Co-creator of TV programmes and commercials
Krzysztof Kusak – Business development manager at Vivid Games
Aleksander Caban – Art Director at Carbon Studio
Denisa Janska – Artist, works at at the University of Ostrava

Konrad Czernik

2017

Experts

Tim Linder – St Loius Community College, USA
Eric Olivares – Graphic designer, Hiszpania/Meksyk
Winfried Ritsch – Artist and research engineer,
specialized in media-art Graz Art University, Germany
Jaromír Plachý – Game developer, Amanita, Czech Republic
Marcela Polochová – Business development manager at Vivid Games,
Czech Republic
Iwona Pomianowska – National Film School in Lodz, Interdisciplinary
Research Center Innovation Lab, VRT, Belgium/Poland
Marcin Goldyszewicz – Art director at The Farm 51, Poland

Eryc Olovares

Marcin Goldyszewicz

Tim Linder

Iwona Pomianowska

2018

Experts

Kunio Kondo – Tokyo University of Technology, School of Media Science, Japan
Kazuo Sasaki – Tokyo University of Technology, School of Media Science, Japan
Victor van Schagen – Coal Power Games, Germany
Valentin Wirth – Hangar 13, Czech Republic
Rafał Polito – Techland, Poland
Błażej Zając – Level designer at IMGN.pro, Poland

Presentations

Kunio Kondo

Ph.D. in Engineering, The University of Tokyo, Japan

Kunio KONDO is a professor in the School of Media Science, Tokyo University of Technology. He received his Ph.D in Engineering from the University of Tokyo in March 1988 and Bachelor from Nagoya Institute of Technology in March 1978.

He was Associate professor of Department of Information and Computer Sciences, Saitama University from 1989 to 2007, Lecturer of Tokyo Polytechnic University from 1988 to 1989 and technical staff member of Nagoya University from 1973 to 1988, a part-time lecturer of Tokyo University from 1991 to 2007, Aichi Prefectural University of Fine arts and Music from 1989 to 1999, Kyushu Institute of Design from 2002 to 2010, Visiting Professor of Management and Science University (Malaysia) from 2014.

His research interests are Computer graphics, Content Producing and Content Production Technology for animation, and Interactive modelling. He received the IPSJ the Anniversary Best Paper Award in 1985, JSGS Research Award in 1985, and JSGS Best Paper Award in 2011.Research Award from Japan Society of Graphic Science in 1988, Engineering Education Award from Japanese Society for Engineering Education (JSEE) in 2013, and also CG-Japan Award from Society for Art and Science in 2015, Fellow of IIEEJ (The Institute of Image Electronics Engineers of Japan).

He is the president of Asia Digital Art and Design Association.He was former President of The Institute of Image Electronics engineers of Japan, former President of The Society for Art and Science, former Vice President of Japan Society of Graphic Science, and Chair of SIG on Computer Graphics and CAD of Information Processing Society of Japan, Board member of Asia Digital Art and Design Association.

Sasaki Kazuo

Ph.D. in Engineering, The University of Tokyo, Japan

Sasaki Kazuo started his career in NHK (Japan Broadcasting Co.) as Art Director in 1983. Awarded the Best Production Design Prize of Japan TV Art Association, 1998. Now he is directing a wide range of project from Projection Mapping in major Rock Concert to Smartphone AR-application Design in Tokyo University of Technology.

Victor van Schagen

Creative Director, Coal Power Games, Germany

Victor van Schagen has been working in the game industry for 11 years. During that time he has worked for Wooga (Berlin), Artifex Mundi (Katowice) and City Interactive (Warsaw). He has enjoyed working on more than 15 projects that include a wide variety of game types, such as first person shooters (Mortyr 3: Operation Thunderstorm), racing games (nail'd), puzzle games (Logic Machines) and hidden object games (Pearl's Peril). Eager to understand the various facets of game development and game art specifically, he has also worked in a variety of creative roles; sometimes with focus on design, sometimes on management, but always with attention to creativity, function and quality.

Valentin Wirth

Editor at Hangar 13, Czech Republic

Valentin is a Cutscene Editor at Hangar 13 responsible for creating cinematics for Mafia 3 and its DLCs. Previously he has worked on trailers, commercials and animated shorts for games and TV. Valentin Wirth in his lectures focuses on the following: How are cinematics created? And how does each step from script to motion capture, through editing and lighting contribute to supporting the story and characters? We will go through our pipeline and explore how each step can help build tension and express your story.

Rafał Polito

Development Tools Analyst, Techland, Poland

Rafał Polito has been working at Techland for over 6 years. Previously worked as a programmer at Unity for 8 years. At Techland he started as Level Designer creating Dying Light levels,. He is currently a Development Tools Analyst, helping other people in the company solve problems related to working in the game development technology. Manages his own team working on his own games. He was a lecturer at the Wroclaw University of Technology and Lower Silesian Higher School for two years. He taught how to create computer games from the scratch at Unity

Błażej Zając

Level designer at IMGN.pro, Poland

Błażej Zając has been designing game levels since 2010. Currently, he works as Lead Level Designer at IMGN.pro in Bielsko-Biała. He has worked on such productions as Afterfall, Sniper iOS, Bruce the game, Ancient Space, Kholat, Seven: The Day Long Gone.

Victor van Schagen, Justyna Stefańczyk

2019

Experts

Aleksandra Giza – Northern Illinois University, USA and University in Opole, Poland/USA
Iwona Pomianowska – Information and audiovisual designer, lecturer at the Warsaw University and at The Schiller National Film School, Postproduction & New Media, Belgium/Poland
Jan Drozd – GGraphics and Animation expert, Department of Graphics and Drawing, University of Ostrava, Czech Republic
Dalibor Bartoš – Coder, game desiger, ower of small indie game studio "Bartoš Studio", Trnava, Slovakia
Francois Serre – Director of the «Courant 3D» Festival, France
Julio Broca – Designer and sociologist, School of Plastic and Audiovisual Arts of Puebla in the Department of Digital Art, Mexico
Vincent Langouche – Festival director, Leuven International Short Film Festival, Belgium
Lukas Najbrt – Expert in computer animation, Faculty of Education, University of Ostrava, Czech Republic
Silvester Buček – game designer and teacher at Masaryk University Brno and University St Cyril and Methodius in Trnava, Slovakia
Sandra Leandro – Department of Visual Art and Design, School of the Arts, University of Evora, Portugal
Ana Telles – Department of Music, School of the Arts, University of Evora, Portugal

Aleksandra Giza, Workshop: *Level up Typography*

Małgorzata Łuszczak, Anita Tabaczkiewicz

Presentations

Lectures

Małgorzata Łuszczak

Ana Telles

Julio Broca
Designer and sociologist, School of Plastic and Audiovisual Arts of Puebla
in the Department of Digital Art, Mexico

Julio Broca is a designer and sociologist. Special Guest for the Colorado International Poster Biennial. He has been an editorial and image consultant for the UN; develops research on artistic phenomena and rebellion. He has been a co-founder of the Grafica Latinoamericana Siglos XX and XXI project alongside the most prestigious Latin American designers. Julio has collaborated with artists and art schools in Mexico, Latin America, the United States, Europe. For fifteen years he has directed Graphic Design classes at the Institute of Social Sciences of his university. Currently – Professor at the School of Plastic and Audiovisual Arts of Puebla in the Department of Digital Art.

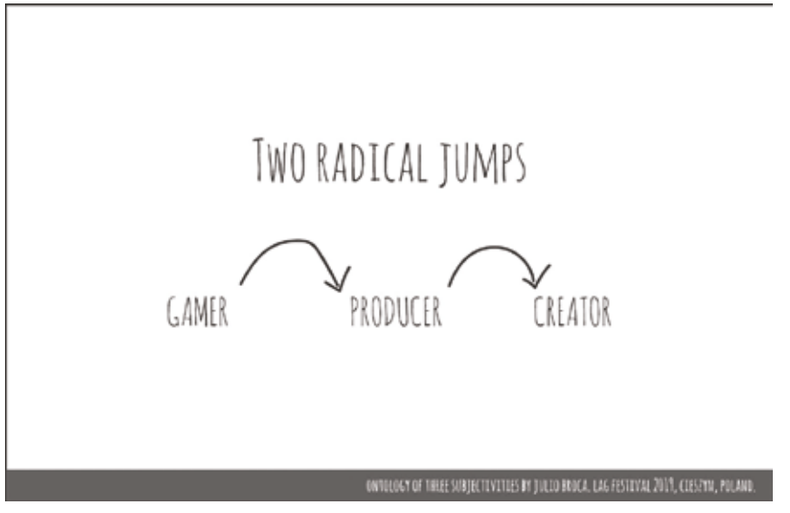
Julio Broca
School of Plastic and Audiovisual Arts of Puebla, Mexico

What would Stanisław Lem say about videogames?

Some notes to discuss the creation of a video game

Today, I will try to propose a critical exercise based on Stanisław Lem's principle of questioning the values involved in our relation with technology. Thus, I will try to delve into the subtle differences of three cultural subjectivities: *the consumer, the producer and the creator*.
In this exercise:

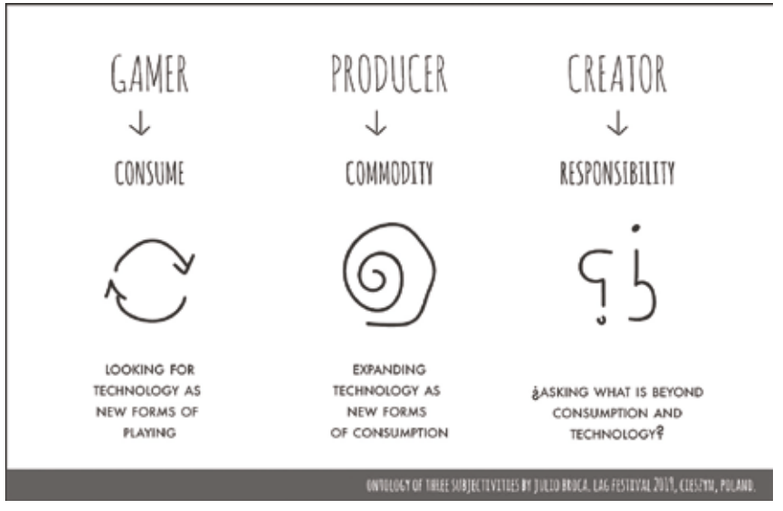
- The *consumer* is the simple player or gamer.
- The *producer* is the subject who decides to produce a game for the gamer.
- The *creator* would be the one who asks what are the implications of creating a game beyond the simple production of a commodity or merchandise.



I. The gamer, the producer and the creator

Most gamers are gamers all their lives. But some of them decide to go further and start producing video games, some others go even further and decide to create games. Therefore, we can say that the *gamer is a consumer; the producer is the re-producer of a technology;* and *the creator goes beyond*

technology. But what is beyond technology... knowledge. Knowledge creates, and according with to Lem, "technology accelerates knowledge but should not be confused with knowledge itself" Technology is based on tools that solve problems, knowledge in the search for unconventional questions. It is important to say that the artist uses knowledge rationally and emotionally, even more emotionally than rationally. Having said that, I am going to make some deeper observations about the possible differences between the gamer, the producer and the creator.

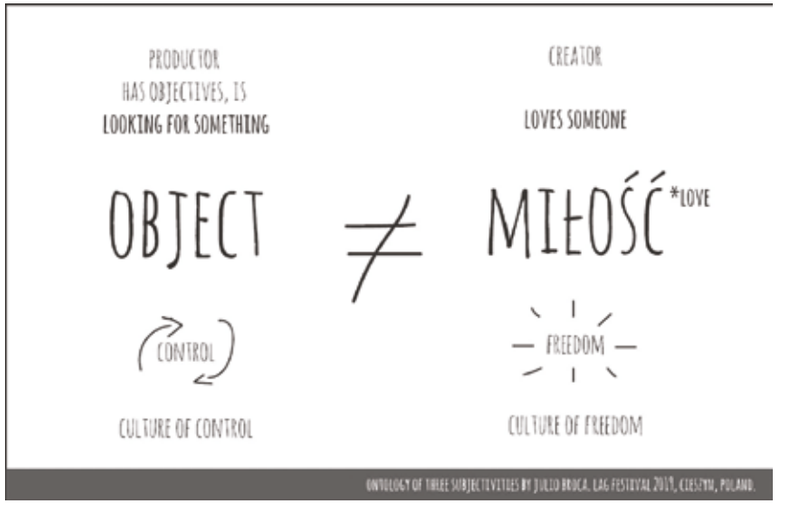


II. The issue of responsibility: a proposal of being

The gamer is exempt from the consequences of their actions because the only consequence of the game is fun itself and, having fun playing a game is not a crime. Neither is the producer responsible for the consequences of the player's actions, he only executes orders and fulfils objectives. On the contrary, the artist is distinguished by responsibility. Then what is responsibility? Let us wonder for a while what responsibility means.

Let me suggest that responsibility is a person, is "a someone". The responsibility then does not deal with objects because it is not about something, it is about someone instead; about people. For example: there is nothing wrong in breaking a plate, as there are millions of plates, unless it is the plate from which the grandparents ate together after surviving the war. In that case a unique and very special plate has been broken. The responsibility dictates that I must at least try to somehow fix it. Only the creative artist will try to repair it. Therefore, we can see the difference between, on one hand, consumption, production-reproduction, and on the other hand creation: *love*. On one side the producer has a goal, and on the other, the creator loves someone.

Love is obviously not an objective because it is not about objects. When you turn what you love into an object, then the discussion is no longer about loving someone but about controlling something. Here we arrive at the point: the most important thing of a Virtual Reality video game is the control, and all the video games exist with the sole purpose of giving the player absolute control of the small virtual reality in which their character exists virtually.



III. The responsibility of creating culture

When a gamer plays a video game to hit, or shoot someone, for example a woman, as in *Grand Theft Auto,* or in Jason's fatalities in *Mortal Combat*, the gamer can always say: it's just a game, I do not do it, I would never do it. And he is right. I say the same. The answer is perfectly logical for a single person, for an individual, but what happens when ten million people play to hit a woman while stealing cars? We must accept that, from those ten million, a percentage will never hit a woman, will never steal a car or behave like Jason. But this only states that another percentage will do it, percentage whose daily routine does not occur in midst of a complex environment of care, but abandoned in front of the screen. I am referring here to the phenomenon

of the digital loneliness of the 21st century. In the era of smartphones, humans are very often "alone-together". In that scenario we do not have a person having fun, we have an entire culture, an entire civilization, having fun with violence. Playing, a real game or a virtual game, implies acquiring social patterns of behaviour. We create culture, «that is a great power and involves great responsibility.

If we – artists do not take this into account, no matter what and how much we create, this indicates that we have not acquired the awareness of the responsibility that characterizes creativity.

By the way, very often the greatest masterpieces of humanity were incompatible with the prevailing social system. The strength of these creative actions today gives us inspiration, and many of the systems that forbade them have disappeared, only creativity survives. It is truly easy and does not need creativity to imagine the end of the world, the apocalypse or dystopias, but imagine a new beginning without the need of violence or death is a true challenge to creativity.

It would appear that we need to become passionate about history to recover creativity. For example, imagine the professors who were teaching the Polish language during WW2 clandestinely. It would be amazing to have a game called the *Masters of clandestine education*. Imagine what the students and teachers had to go through in order to continue studying the Polish language during the Nazi invasion. If we develop that game, it is likely that we are going to start creating gamers which will help the player practice spelling. For example, after sabotaging a war tank, defeating an enemy, as part of the challenges in the game, the player will go to the next level with a poem of Szymborska or Miłosz. Such games would serve as a cultural asset, especially for those who are abandoned by their parents to be educated by television, Internet and the videogame console. You are lucky to speak Polish. In my case, I speak Spanish because my ancestors lost not only the war of the weapons, they lost the cultural war, too.

If we do not take the question of responsibility and creativity seriously in art, we are condemned to repeat history, both in real life and in virtual life. The drones that threw bombs in Iraq were operated like a videogame by the soldiers, who enjoyed the ambiguity of the situation, confusing their act with a videogame. In their minds they never shot someone but something, they just handled controls to destroy targets, not real people.

What we are talking about today, here in the LAG Festival, it is possible because we are at the university, because the university is not a factory to produce employees but a place to make creators. If the universities forget about it, they forget their essence. It became very famous the response of a person who worked in the concentration camps when asked if he was responsible for his actions, and he replied, "I only did my job, I was following orders". It is true, the worker produces and reproduces a system without asking about its social implications beyond his salary and much less asking about his responsibility. This is not bad, nor is it good, this is what life is characterised by. We are not going to judge that, but we are here because we aspire to produce games that are played by many people... people, not robots.

IV. Conclusions

If the fundamental difference between a simple player (gamer) and a creator is the responsibility, we already have the idea that being a creator of video games is to be the creator of different types of responsibility, types of attitudes; we can create knowledge, hope, we can create aesthetic experiences going far beyond the simple mechanical drive. This may be risky however, in my opinion videogames must aspire to the greatness of literature or film, therefore the creator ought to be a great reader, a great *connoisseur* of the film, photography, painting, or even cooking, especially here in Poland, with the Polish cuisine. To know how to cook is to know how to love. If you are able to make the best *pierogi* in the world, then why would you not be able to make the best video game that has ever been created?

Aleksandra Giza

Associate professor at the Northern Illinois University, DeKalb, USA
and professor at the University of Opole, Poland

Aleksandra Giza, Ph.D. is an associate professor of the Visual Communication program in the School of Art and Design at Northern Illinois University and a professor of the University of Opole. She graduated from the Fine Arts Academy in Cracow, Katowice Branch, Poland, where she also started her academic career in 1989. After being awarded the UNESCO-Ashberg Grant in 1996, she participated in the design research program at Jan Van Eyck Akademie in Maastricht, The Netherlands. She relocated to the United States in 1998 where she continues to teach undergraduate and graduate design at the School of Art and Design, Northern Illinois University. Since 2014, she also teaches design at the University of Opole.

In her research, she focuses on cultural and historical conditions influencing contemporary design. Another aspect of her interests is unconventional typography. Aleksandra Giza designs posters and books, performs curatorial functions, and writes about design. She lectures at schools in Europe, America, and Asia. Since 2005, she has been running annual study abroad programs focusing on foreign design and culture.

Francois Serre

Director of the Courant 3D Festival, France

Francois Serre is Director of the Courant 3D, Angoulême's immersion and interactivity festival "New technologies / New storytelling". A curator at different festivals including the Clermont Ferrand International Festival and the Berlin Interfilm.

A teacher specializing in classical music and documentary, but also a director of short films and documentaries. François Serre holds a master's degree in signal processing, a master's degree in documentary (director) and a master's degree in sociology. On a regular basis, he conducts training missions in film schools in the United States, Africa and Asia.

Vincent Langouche

Festival Director, Leuven International Short Film Festival, Belgium

Vincent Langouche has been the programme director and coordinator of Leuven International Short Film Festival in Belgium since 2016. He has worked for the festival in all conceivable capacities in the last 13 years, ranging from editor, director, operator and programmer to volunteer. Besides the short film festival, Vincent also works as a programmer for Docville, International Documentary Film Festival Leuven and freelances as an editor, animator and director. Apart from his degree in film direction, he holds a degree in Astrophysics and as such he is no stranger to science, technology and programming.

Silvester Buček

Game designer and teacher at Masaryk University Brno
and University of Ss. Cyril and Methodius in Trnava, Slovakia.

Silvester Buček is a game designer and a games teacher at Masaryk University in Brno and The Faculty of Mass Media Communication in Trnava. He worked on a geolocation game "Hraj Sa for Bratislava City" and participated min several smaller projects. His passion is the educational potential of games and gamification, not only in schools but also in HR and other fields of human learning. More information can be found on Gamingguru.eu.

Dalibor Bartoš

Electronics enthusiast, coder, game designer,
owner of a small indie game studio „Bartoš Studio" in Trnava, Slovakia

Dalibor Bartoš was born in 1983 in Slovakia. He is an IT and electronics enthusiast, coder, game designer. Founded a small software/hw company in 2003-2007 (MiDEx Computer). Since 2016 owner of a small indie game studio „Bartoš Studio": (http://bartos-studio.com/), creating games mainly for virtual reality. His most notable application is "UAC – Universal Anticheat". It was used by over 300 000 players between 2005 and 2014 in almost every existing gaming league (ESL, Clanbase, etc.) all over the world (more info at: http://uac3.dexus5.com/).

Dalibor Bartoš is an active participator on game jam events, in 2015 founder of TEDI Games (www.tedigames.sk) a group of active game creators that participate on game jams. He is currently studying Theory of Digital Games at University of Ss. Cyril & Methodius in Trnava as an external student.

Lukas Najbrt

Expert in computer animation, Faculty of Education,
University of Ostrava, Czech Republic

Lukas Najbrt PhD is an expert in computer animation and VFX, graphic design and movie production. He works for QQ studio Ostrava and teaches computer animation and compositing at the Faculty of Education at the University of Ostrava.

Zespół Projektowania Gier i przestrzeni wirtualnej Wydziału Artystycznegow Cieszynie Uniwersytetu Śląskiego oraz goście specjalni prof. Senih Cavusoglu i dr Firat Tuzunkan z Eastern Mediterranean University, Cypr

Katarzyna Kroczek-Wasińska, Kaja Renkas, Ewa Jaworska, Jarosław Korczak, Małgorzata Łuszczak, Paweł Synowiec, Justyna Stefańczyk, Wojciech Osuchowski

LAG Festival 2018 – *HONORABLE MENTION of the Poster Competition*
Damian Klaczkiewicz, PL

Paweł Synowiec
University of Silesia in Katowice, Poland

He obtained a doctoral degree in 2006 in the field of visual arts in Cieszyn Art Institute at the Silesian University in Katowice. He obtained a Master of Arts degree in 2000 with honours in the Academy of Fine Arts in Cracow, with its branch located in Katowice.

He elaborated and implemented the e-learning materials for the studies of "Computer Games Graphics" (postgraduate studies) in the framework of the project "Increasing participation of adults in education in the scope of IT tools and technologies NITKA", "Computer Games Graphics" 1st degree studies and "Computer Games Graphics" 2nd degree studies.

He presented a research poster, along with prof. Małgorzata Łuszczak and PhD Katarzyna Kroczek-Wasińska, entitled: "The programme and methodology of art education used in a practical course preparing students for work in creative industries" during the 11th Asian Forum on Graphic Science in Tokyo 2017. He took part in many exhibitions of posters and prints in Poland and abroad. His main field of interest is now 3D graphic.

He conducted a study visit at the Tokyo University of Technology at the Department of School of Media Science in the framework of the project „Increasing participation of adults in education in the scope of IT tools and technologies NITKA" between 04.05.2015–06.06.2015.

LAG game jam

Paweł Synowiec
University of Silesia in Katowice, Poland

The LAG Game Jam is a five-day workshop. Over this time students work day and night in teams to create a video game level. The teams consist of students from faculties and specializations which are directly related to the video games production. First and second-degree students from the faculty of Game and Virtual Space Design in Cieszyn , specialization Computer Game Graphics, are the largest group of all students participating in the workshop. Also the students from the same faculty, specialization Sound in Games, take part in the LAG Game Jam workshops, composing music and creating sound effects for the newly created games.

Since a video game is an interdisciplinary product, the participants are also students from the University of Silesia, Faculty of Computer Science and Materials Science, specialisation Computer Science, Games Design, and students from the Faculty of Philology, English Philology, specialization: Interactive Entertainment Design and Games and Software Localization (SPRINT-WRITE).

The Festival of Art and Independent Games is an international enterprise, in which, apart from the University of Silesia, the University of Ostrava, Czech Republic and University of Ss. Cyril and Methodius in Trnava, Slovakia are engaged. During four editions of the Festival the LAG Game Jam workshop took place twice in Cieszyn, once in Ostrava and once in Trnava. The students from the above mentioned universities in Ostrava and Trnava took active part in all the four editions of the festival. There were a few teams built up from a few or several members.

The LAG Game Jam workshop is meant to be a practical test of the students' skills and the didactic materials used by the teachers during classes and lectures. It is a training ground where the students not only use their knowledge but also learn to work as part of teams, cope with stress and tiredness. The workshop attendees have to face not only the time pressure but also the competition-related pressure. This process of creating games is full of emotions despite no high financial rewards, only the diplomas and sheer satisfaction.

The observation of the students' work has enabled the academics to generate may reflections and conclusions which have in turn led to modifying the existing forms of education especially in the field of the computer games graphics.

The LAG Game Jams have proven to be an excellent didactic tool, which has enabled the students to pursue their passion: creating video games, and the academics to improve the forms and methods of education in this very new field, to which, due to its specificity, it is still hard to apply the traditional teaching methods.

Workshop 2018

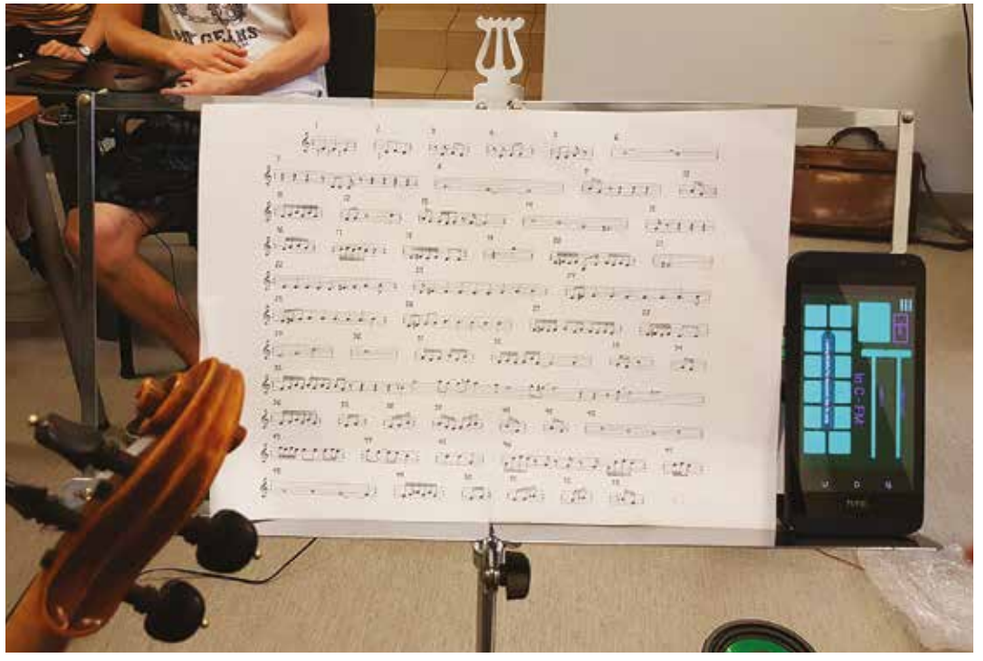
Workshop 2017

2016

Lag Game Jam 2016 took place in the Sport- Performance Hall of the Faculty of Fine Arts and Music, in Cieszyn, branch of the University of Silesia in Katowice.

Workshop

Workshop



Workshop

Workshop

TEAM BLUE

The best game
Imperial Quantum Destruction

Andrzej Wysocki — Art & Design
Kamil Tarnawa — Music & SFX
Przemysław Ziaja — design & SFX
Adam Dyląg — 3D art
Tomasz Hankus — 3D art
Mateusz Cios — Animation
Bartosz Adamiecki — Story
Marcin Łopusiewicz — Code & design
Barbora Mikudová — Art & Voice-over
David Kozák — Art & Voice-over
Matúš Pastor — Story & Montage

Imperial Quantum Destruction, The Winner of Festival of Art and Independent Games 2016

2017

LAG Game Jam 2017 took place in the Sports Hall of the university of Ostrava.

Workshop

Workshop

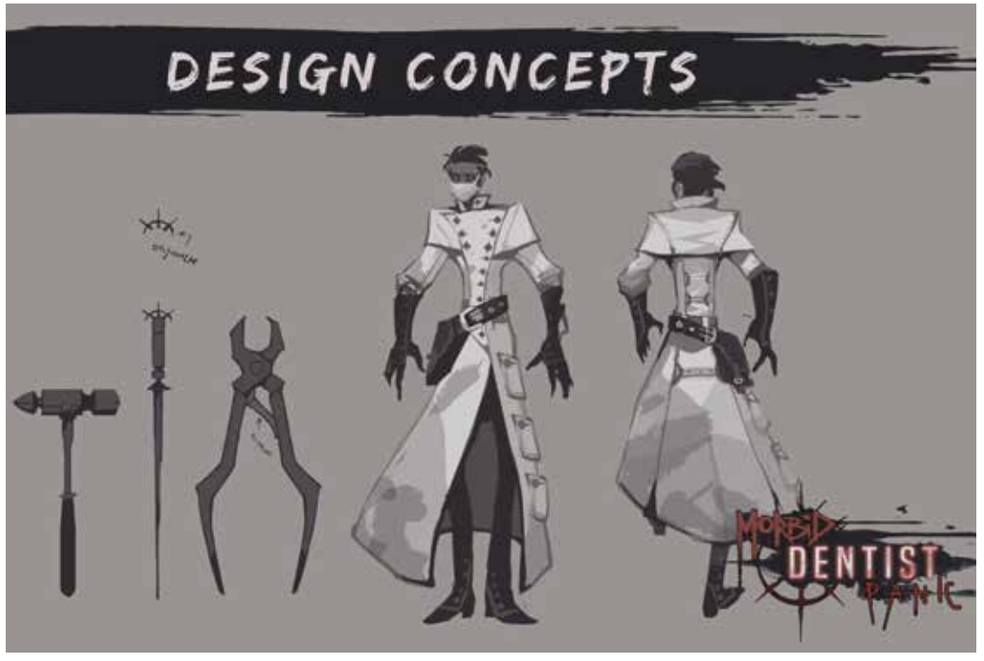
Workshop

Workshop

TEAM BLUE

The best game
Morbid Dentist Panic

Adrian Kuś — 3D graphics, level design
Daniel Janowski — Gameplay programming
Kacper Ignasiak — Soundfx, soundtrack
Merlena Kiepel — 2D & 3D graphics
Patrik Balonanimations — 3D graphics
PiotrDejneka — 3D graphics
Robert Kędryna — Writing
Tomáš Bencko — Level design
Wojciech Borkowski — Particle effects
Artur Kosmaanimations — Programming
Patrycja Bobrowicz — Level design



Morbid dentist Panic, The Winner of Festival of Art and Independent Games 2017

Morbid dentist Panic, The Winner of Festival of Art and Independent Games 2017

2018

LAG Game Jam 2018 took place at the University of Ss. Cyril and Methodius in Trnava, Slovakia.

Workshop

Workshop

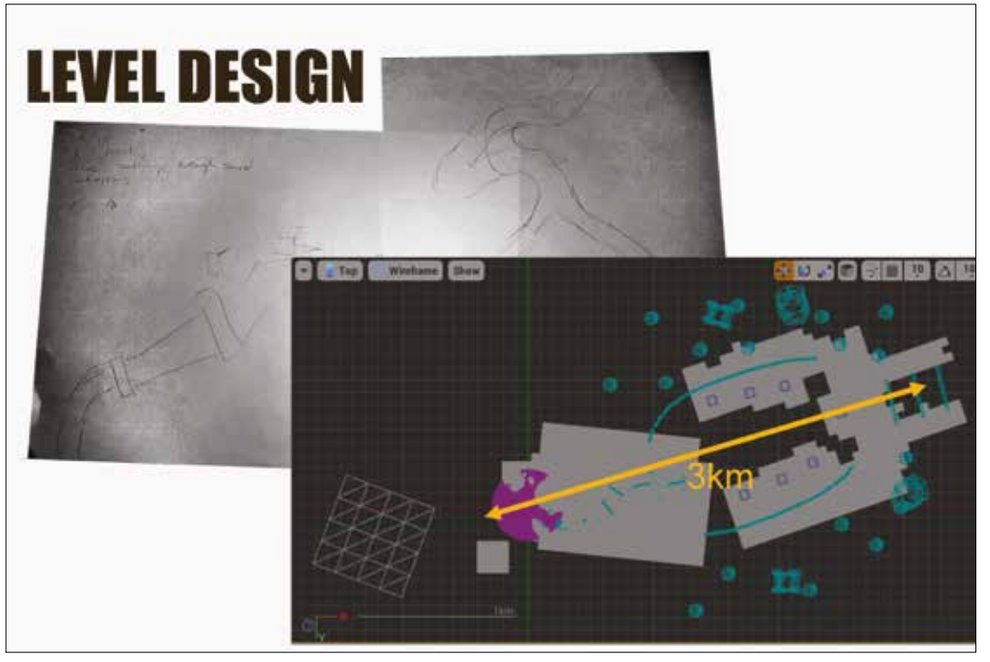
Workshop

Workshop

TEAM ORANGE

The best game
Unreal sailboat derby

Joanna Stróżyk – Level design
Monika Dalach – Animation and 3d graphics
Monika Ściblak – 2d art and concepts
Urszula Własstow – 3d graphics
Dalibor Bartoš – Programming and game design
Juraj Mikula – Animation and 3d graphics
Barbara Boroń-Rak – 3d graphics
Maciej Balcer – Sound effects and music
Rafał Ściblak – Particle systems



Unreal sailboat derby, The Winner of Festival of Art and Independent Games 2018

Unreal sailboat derby, The Winner of Festival of Art and Independent Games 2018

2019

LAG Game Jam 2019 took place at the University of Silesia in Katowice, Faculty of Art in Cieszyn, New Media Lab.

Workshop

Workshop

Workshop

Workshop

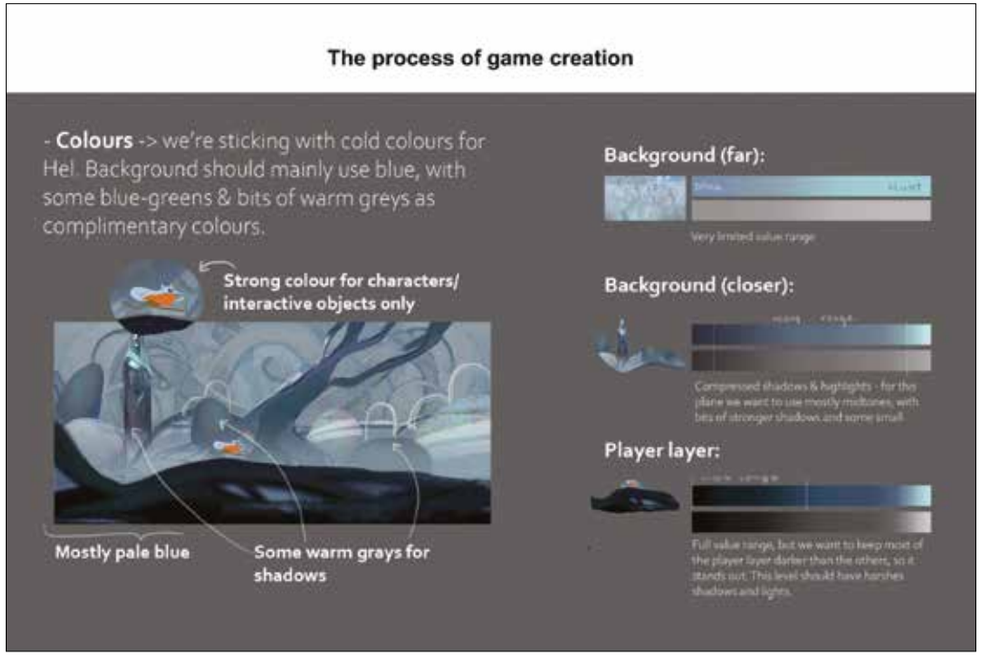
TEAM ORANGE

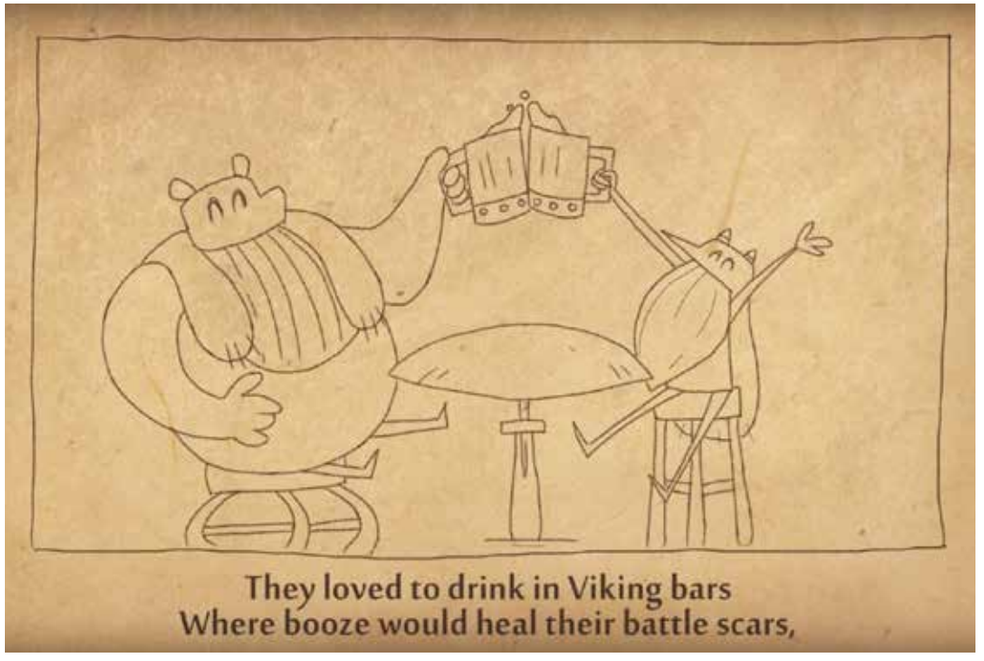
The best game
Underground Viking Roundup

Paulina Michalska — Project management, Level design, Intro animation, Film editing
Zuzanna Wużyk — Enviromental assets & Backgrounds
Aleksandra Szczyrba — Level and gameplay designer/manager, Assets designer, Assistant for assets creators
Štěpán Wilkus — Main character design and animation
Dominika Nosková — Main character animation
Tomáš Fusko — Main Character code, Level Mechanics, User Settings, UI functionality
Samuel Michelko — Multiplayer Mechanic code, Level building
Anna Pytlewska — Enemy and asset design
Nikolas Staník — UI / HUD
Natalia Nestorowicz — Enemy design & animation, Asset design
Karolina Cebula — Asset design and enemies animations
Klaudia Dziewięcka — Music, Writing, Additional storyboard

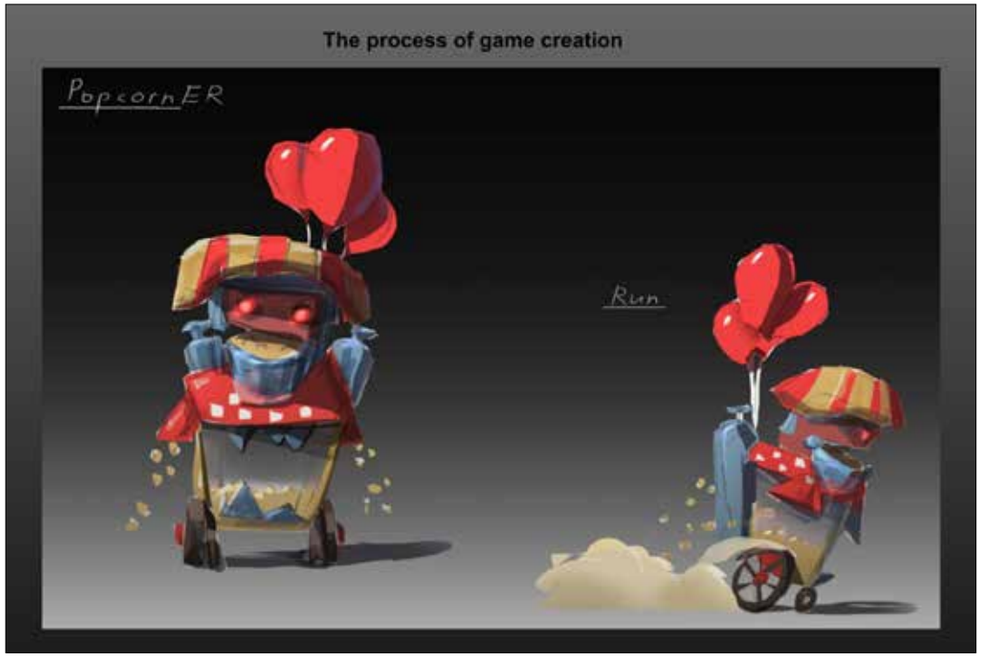
Lenka Nogová — SFX
Cyprian Stachowicz — Level and Gameplay Design, Enviro, Asset design
Štěpán Hýbl — Additional character design and animation, Enemy and level concept art
Damian Lenkiewicz — Assistant programmer
Javier Salinas - Narrator voice

Underground Viking Roundup, The Winner of Festival of Art and Independent Games 2019

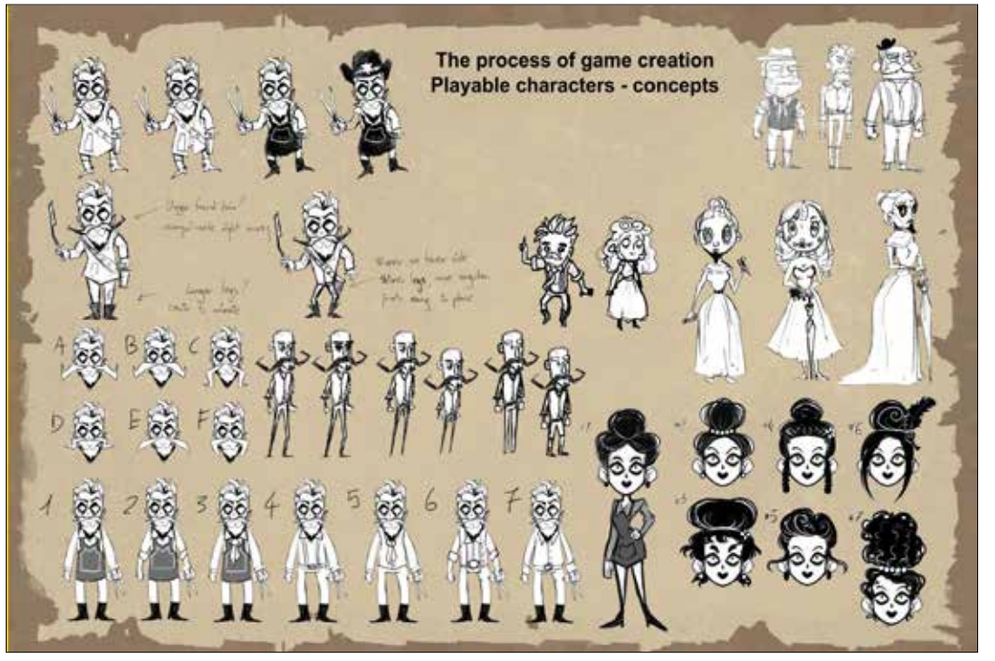




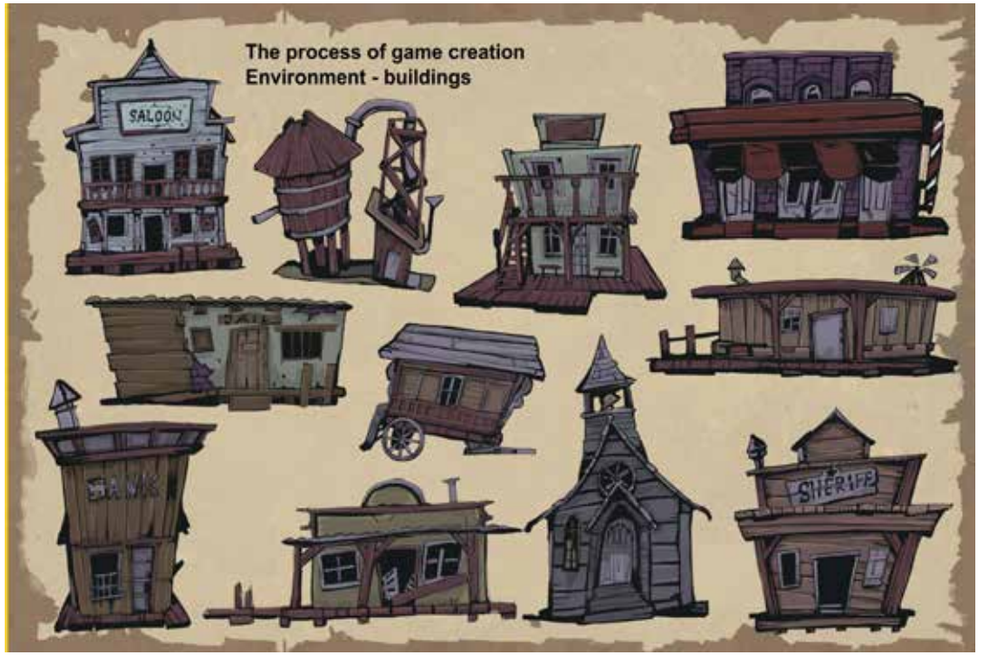
Team Orange, *Underground Viking Roundup*



Team Black, *Darkest Theme Park Inspector*



Team White, *Doom BarberWild West Beautician of Doom*



Team White, *Doom BarberWild West Beautician of Doom*

Workshop

LAG Festival 2019 – *HONOURABLE MENTION of the Poster Competition*
Peter Eliáš, SK

LAG Festival

Małgorzata Łuszczak
University of Silesia in Katowice, Poland

The LAG Festival is the summary of the events from the whole year: the finals of the competitions related to the Festival of Art and Independent Games. The festival is open to the public. It took place in Cieszyn every year. The festival stage was located in the Hala Widowiskowo-Sportowa (Performance and Sports Hall) in Cieszyn during the first two editions, whereas the last two editions took place at the Main Market Square. Presentations were given by the students taking part in the festival, residents of Cieszyn and students from a number of schools from all Silesia, including those from Bielsko-Biala, Katowice, Tarnowskie Gory, Wodzislaw and more.

The main part of the festival is the LAG Game Jam - presentations of the students' projects created during the workshop. The jury consist of independent experts from the video game industry. A special distinction is the audience award for the project chosen by the whole academic community from all the universities taking part in the festival. All the awards are honorary.

During the LAG Game Jam festival awards were also presented to the school attendees of the LAG Arena competition, there was a presentation of the best diplomas and distinctions were given for the best independent games released during the previous year. An important part of this event was the LAG Music, which included concerts in Cieszyn and the University of Silesia. Various orchestras, professional bands and student bands supported by the pedagogues played during this event.

Each year the LAG Festival is accompanied by several events, such as workshops for the secondary and high schools students, the LAG Con – a board games competition, e-sport competitions, painting the sponsor's car, cosplay, international poster competitions, exhibition of the works created by Design of Games and Virtual Space students, etc.

2016

Paweł Synowiec

Konrad Czernik

LAG Festival

Letnia Akademia Gier
Festival of Art and Independent Games
12. 06.–25. 06. 2017

12. 06.–16. 06.	LAG GAME JAM (Ostrava)
24. 06.–25. 06.	LAG MUSIC (Rynek w Cieszynie)
24. 06.–25. 06.	LAGcon (Zespół Szkół Ekonomiczno-Gastronomicznyc w Cieszynie, Dom Narodowy)
24. 06. 2017	LAG EDU (Hala Widowiskowo-Sportowa w Cieszynie)
25. 06. 2017	LAG FESTIVAL (Hala Widowiskowo-Sportowa w Cieszynie)

lagfestival.us.edu.pl
facebook.com/lagfestival
letniaakademiagier@gmail.com

Projekt współfinansowany w ramach programu Unii Europejskiej „Kreatywna Europa"

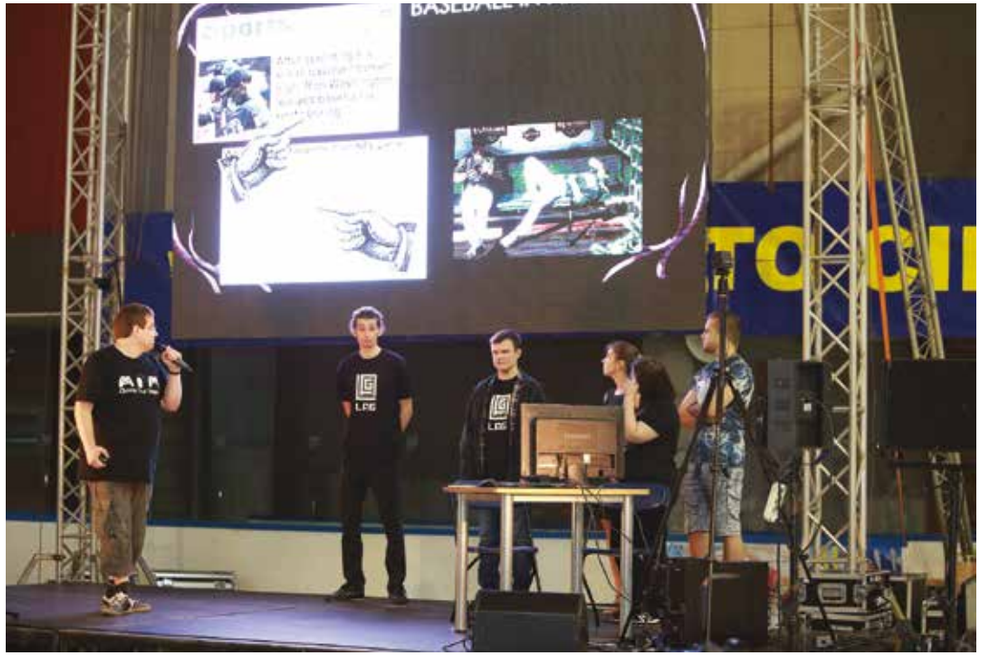
2017

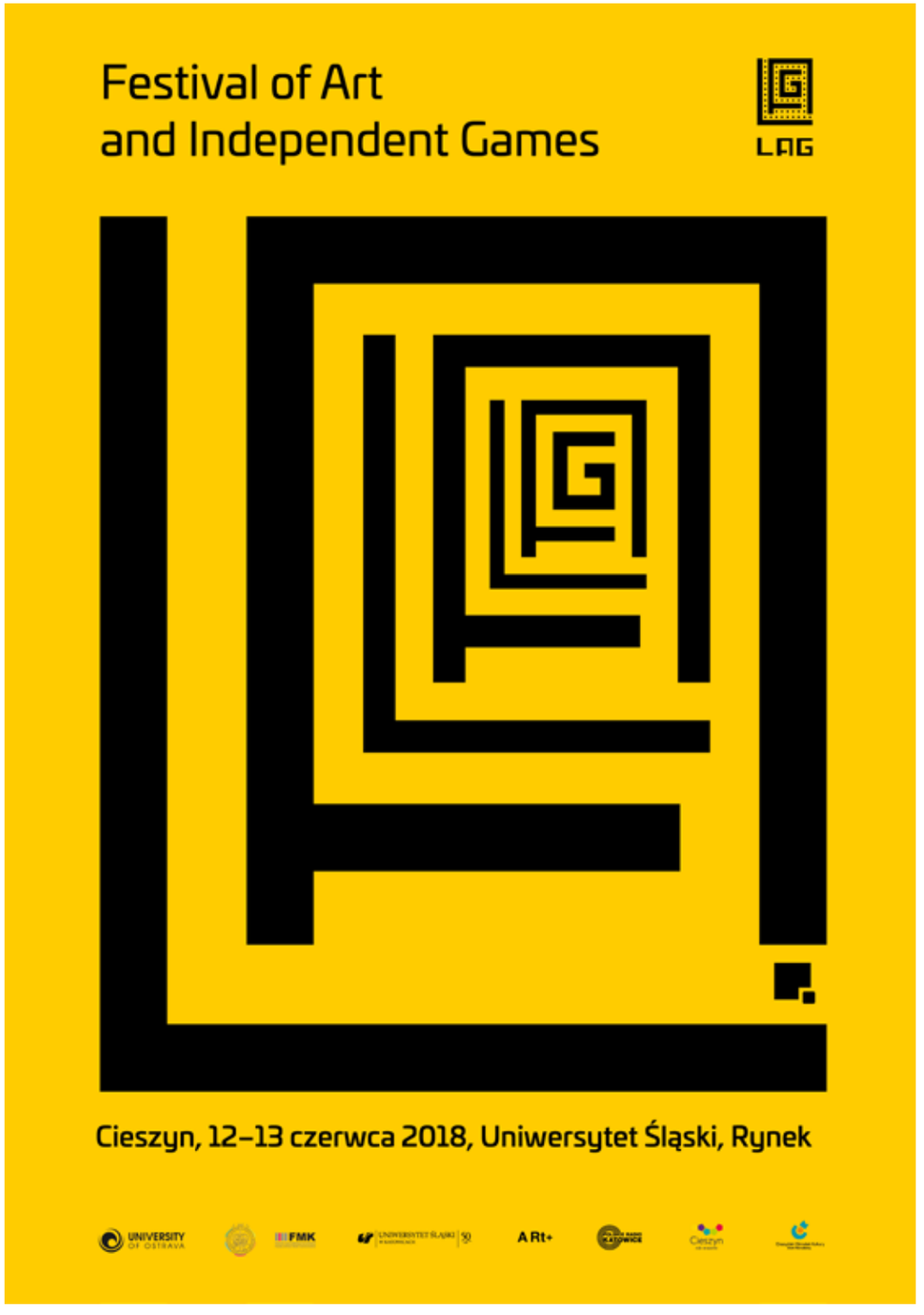
Nagrody

Festival organizers with Mayor of Cieszyn Ryszard Macura

Festival organizers with Mayor of Cieszyn Ryszard Macura

Michał Kabat





2018

LAG Festival 2018

Marek Sybinski, Mayor of Cieszyn Ryszard Macura, Małgorzata Łuszczak

Presentation

Kaja Renkas, Krzysztof Gawlas, Wojciech Osuchowski

The Best Diploma 2018, Adrian Kuś

The Best Diploma 2018, Janka Sobota

2019

LAG Festival 2019

Mayor of Cieszyn Gabriela Staszkiewicz, Małgorzata Łuszczak

LAG Festival 2019
Justyna Stefańczyk, PL

Winners 2019

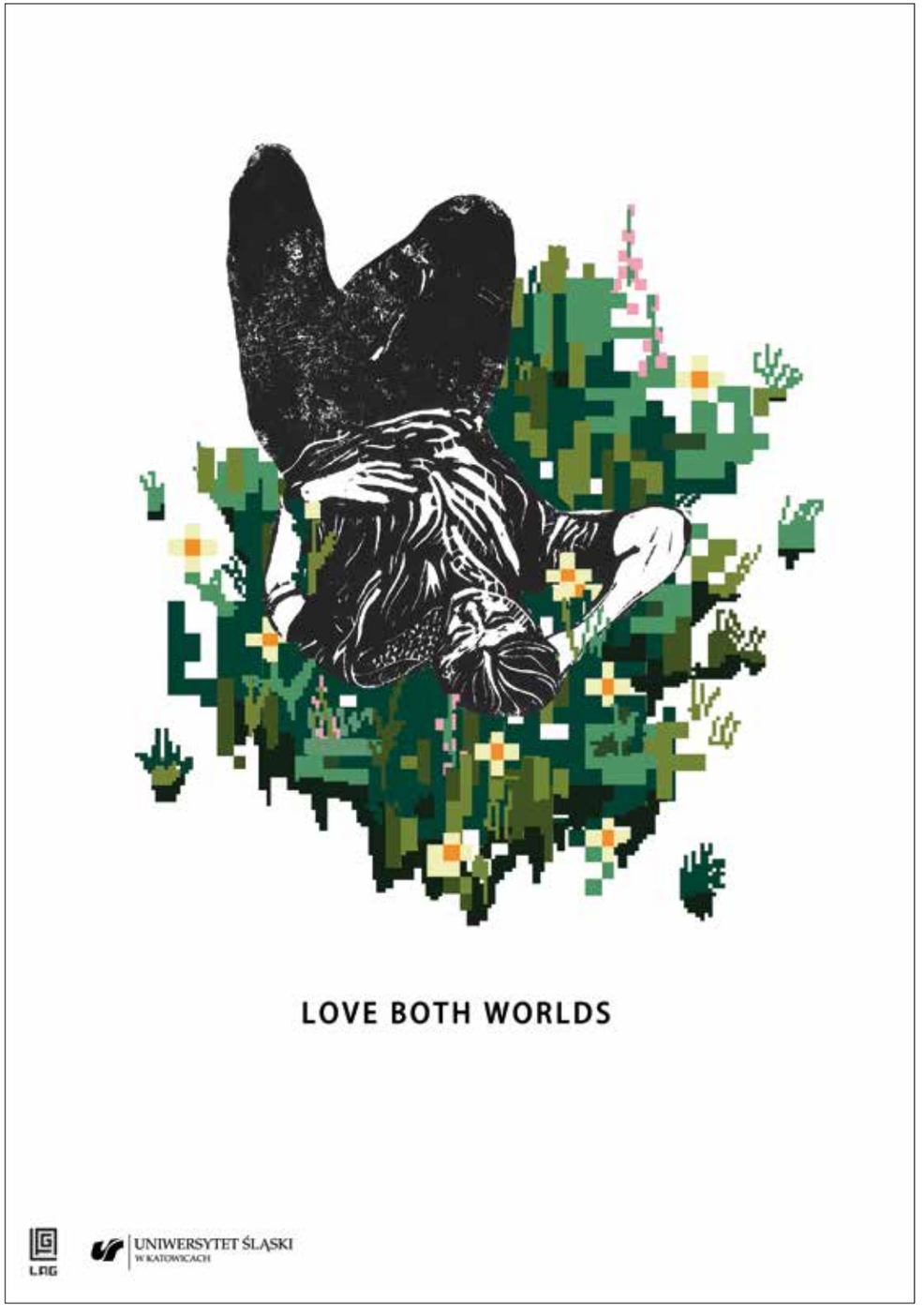
Opening Ceremony 2019

Krzysztof Gawlas

Uczestnicy konkursu

LAG Festival 2019

Ewa Jaworska, Aleksandra Giza, Iwona Ponianowska, Francois Serre, Magdalenia Szczepocka, Julio Broca, Edyta Witczak



LAG Festival 2019 – *THIRD PRIZE in the Poster Competition*
Aleksandra Szczyrba, PL

Kaja Renkas
University of Silesia in Katowice, Poland

Kaja Renkas graduated from the Academy of Fine Arts in Katowice, Poland, where she specialised in Artistic Printmaking. She obtained a honourable diploma at professor Waldemar Węgrzyn's studio in 2004. Since 2011 she has been an academic teacher and lecturer at the University of Silesia, at the Institute of Art. In 2010 she completed her PhD at the University of Silesia, Katowice.

Kaja Renkas coordinated workshops on graphic design and poster art in North Wales School of Art and Design, Wrexham (Wales), Northern Illinois University, DeKalb (USA), Bilkent University, Ankara (Turkey), to name a few. She has participated in the most important worldwide poster events: in Warsaw, Bolivia, Teheran, Lahti, Toyama or Moscow, and more. Renkas is a laureate of awards and distinctions. Her works are presented in private and museum collections. She has had numerous solo exhibitions nationally and worldwide. Kaja Renkas also took part in several group exhibitions all around the world. The scope of her work encompasses poster art, graphic design and artistic printmaking.

Independent games

Kaja Renkas
University of Silesia in Katowice, Poland

Independent games

Every year the most interesting independent games are awarded during the festival. The awarded games, produced by small independent game developers, represent a very high level of quality, both in terms of their artistic realisation and the overall concept.

This annual review optimistically proves that a number of outstanding productions do not have to originate at world's greatest game monopolists, but they may as well be developed by small independent studios that prosper incredibly well in Poland and across Europe.

The Vanishing of Ethan Carter, a game awarded in 2017, is an adventure video game developed and published by The Astronauts, an independent Polish studio in Warsaw. This game, The Astronauts' first production, became an instant commercial hit and artistic success. The game was awarded in the 2nd Edition of LAG Festival and received the prestigious BAFTA award.

The Vanishing of Ethan Carter is a first-person mystery game focused on exploration and discovery. The player takes on the identity of Paul Prospero the main character, who goes on a cryptic, gloomy journey to find the missing boy, Ethan Carter.

The well-written script and absorbing plot combined with the compelling stylistics, skilfully rendering the bleak and occult atmosphere, make the exploration of the world created The Astronauts pure indulgence and lavish entertainment for the player.

The photogrammetry technique applied in the game creation (the extraction of the 3-D digital objects from the two-dimensional photographs taken with the use of standard digital cameras), has enabled the game producers to achieve the effect of unobtrusive photorealism introducing the player to the mysterious occult setting.

The Symmetry game was awarded in the 3rd Edition of the Festival. This game was produced by Sleepless Clinic, an independent studio from Bielsko-Biala.

The Symmetry, Winner 2018

retreived on 02.09.2019 via: https://graczpospolita.pl/symmetry-trafia-do-imgn-pro/

Symmetry is a 2D exploration game, beautiful in is form, geometric simplicity and unobtrusive use of pastel and monochromatic colours.

The game begins with the crash-landing on an abandoned planet that players set off to explore. The suspense-building plot absorbs the gamer in a bizarre world created by the artists from the Sleepless Clinic studio.

Chuchel, published in 2018 by Amanita-Design, a Czech game developer, is a game awarded in the last edition of the Festival (2019).

Advertised by its creators as a game with 'dozens of hilarious gags that warm up even the coldest of souls', the game is noteworthy for its cheerful situational humour.

It's an amiable comedy adventure game about a furry critter named Chuchel who embarks on his quest to retrieve the precious cherry. This is not the first production of Amanita-design, a small yet professional, experienced developer (established in 2003 by Jakub Dvorsky). Each game produced by Amanita-design have been both an artistic and commercial success.

The hypnotizing, enchanting world created by the artists with vivid imagination makes this game sheer entertainment and pure pleasure to play.

The main character and his companions demonstrate excellent character design in terms of their form and animation. The specific Czech humour present throughout the game adds to the uniqueness and outstanding character of the game.

Chuchel, Winner 2019

retreived on 02.09.2019 via: https://amanita-design.net/games/chuchel.html

Chuchel has been awarded several times, at IGF 2018, Anifilm 2018, CEE-GA 2018, BIG Festival 2018, to name a few.

The annual review proves that the market for indie games is constantly developing, with a number of interesting and innovative productions coming out, new independent game developers' studios being opened and the demand for indie productions constantly growing.

Chuchel, Amanita Studio. Denisa Jansky accepts the award for the best independent game of 2019

LAG Festival 2019 – *HONORABLE MENTION of the Poster Competition*
Davit Eduardo, HU

Wojciech Osuchowski
University of Silesia in Katowice, Poland

A graphic designer, an art director, and a prepress specialist. A graduate of the Art Institute in Cieszyn, the Faculty of Arts of the Silesian University. In 2016, Osuchowski was recognized by the Rector of the University of Silesia for outstanding artistic achievements. He was awarded the title of the doctoral student of the year 2016 at the University of Silesia and received a scholarship of the Ministry of Science and Higher Education. He currently works as an assistant professor in the New Media Department of the University of Silesia in Cieszyn. He deals primarily with social poster, which he considers to be his way of "grappling" with the world and a commenting on the surrounding reality. He also works as a graphic designer, a photographer, a multimedia artist, a web and logo designer. His works have been presented at over 150 solo and public exhibitions in Poland, Europe, Asia and both Americas. Winner of over a dozen awards and distinctions, mainly for his poster works.

THE LAG POSTER CONTEST

Wojciech Osuchowski
University of Silesia in Katowice, Poland

LAG Poster Contest

The activities of the New Media Department at the Faculty of Art in Cieszyn, University of Silesia in Katowice, connected with the organization of the Festival of Art and Independent Games - LAG was much more than just games and digital media. Because the students of the Games and Virtual Reality Design programme obtain the designer's qualifications in a broader sense, a competition for the best poster dedicated to the students from this department took place as part of the festival in 2017. Several dozen people took part in the competition and the best works were presented at the Silesian Castle of Art and Enterprise in Cieszyn during the festival.

In order to promote the festival, its organizers decided that in the following editions the poster competition would be directed at a wider public. Although the competition was mainly addressed at young designers, students and graduates from art schools, more people were invited to take part in it. It was an open competition and any adult interested in the graphic design and poster art was welcome to take part in it.

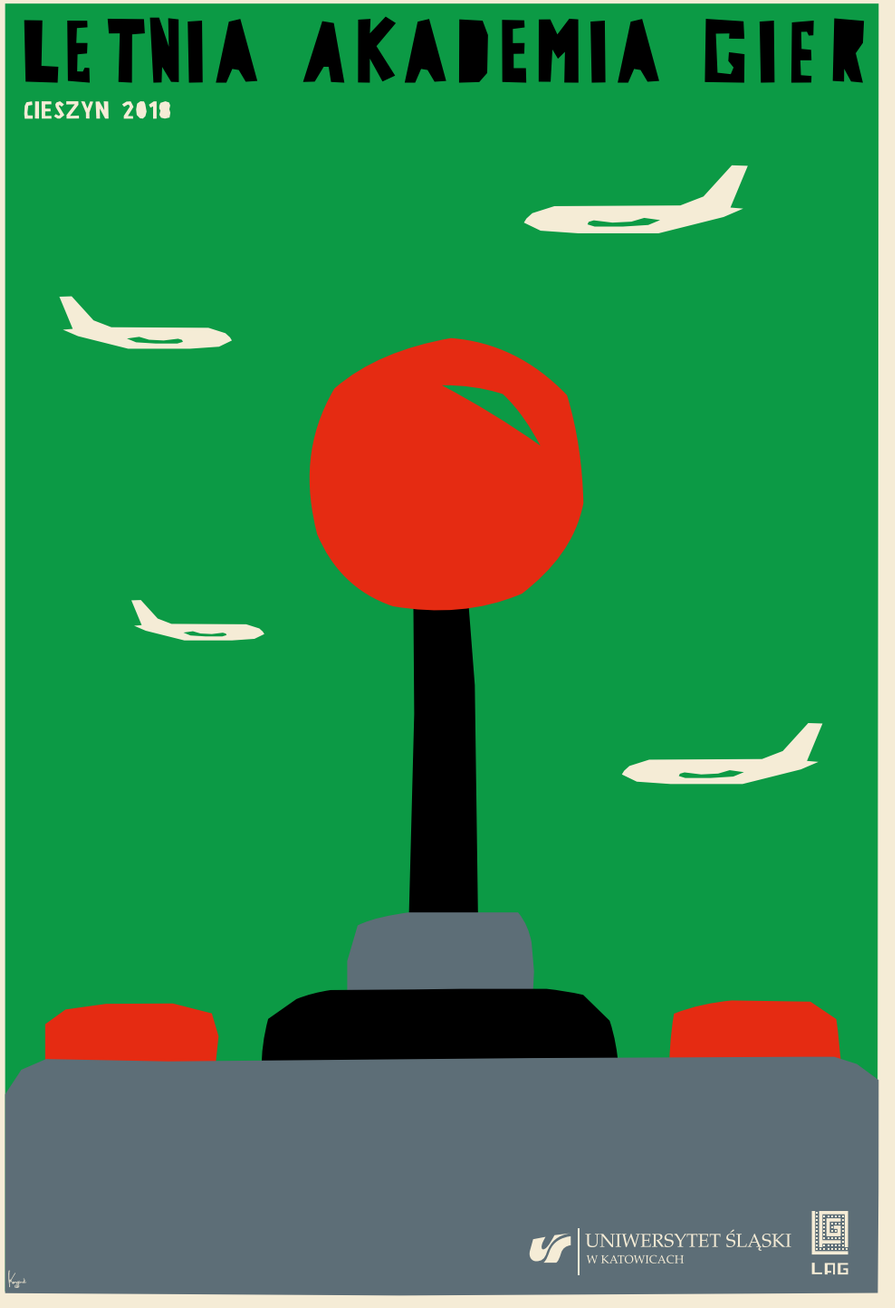
In 2018 several dozens of artists from 8 countries submitted their works, 21 out of which were qualified to the post-competition exhibition. These posters were presented during the festival at a conference in the campus in Cieszyn. Three awards and three distinctions were presented by the international jury. In the first and second edition of the LAG Festival of Art and Independent Games in the poster competition the subject of the poster was the LAG Festival, whereas the competition instruction 2019 was to design a poster or posters illustrating the following theme: "Real world/virtual world". Over 370 works representing 21 countries were submitted to the competition. The pre-selection jury of the New Media Department lecturers made the initial selection and qualified 63 works to the post-competition exhibition and chose 20 finalists. The LAG Festival organizers invited the lecturers and experts of the international Art, Media and Games conference to be the members of the jury in the main competition. They picked the awards and distinctions winners from the 20 final works. Apart from the traditional posters, different animated post-

ers and works created with the use of AR technology (Augmented Reality) were submitted to the competition. The final works were presented at the Faculty of Fine Arts during the Art, Media and Games conference. All the qualified works were presented in the 'Galeria 12' art gallery of the National House in Cieszyn between 4 and 6 June 2019. They were also displayed on a large outdoor screen at the Main Market Square in Cieszyn during the LAG Festival final.

Kuba Chojnacki 2017

Kaja Renkas, Wojciech Osuchowski, Małgorzata Łuszczak

Robert Lipka



LAG Festival 2018 – *THIRD PRIZE in the Poster Competition*
Patryk Krygowski, PL

LAG music

Paulina Bielesz
University of Silesia in Katowice, Poland

LAG MUSIC is the musical part of the LAG Festival. Each edition of the Festival ofArts and Independent Games was accompanied by several concerts of video games compositions and electronic music. The concerts took place in different locations of Cieszyn, such as the Hala Widowiskowo-Sportowa (Performance and Sports Hall), the Cieszyn Castle Brewery hall and the Main Market Square in Cieszyn.

In the first edition of the festival two concerts took place. The first one was an open concert played during a banquet in the Cieszyn Castle Brewery hall. In the first part of the concert the Mobile ORC mobile orchestra conducted by Krzysztof Gawlas, PhD presented their music. The students played the music with the use of different mobile devices. The second part of the event was the concert given by the Cieszyn Brass Orchestra of the University of Silesia conducted by Karol Pyka, PhD. The orchestra's repertoire was the famous musical themes from the computer games adapted for the brass orchestra

by the lecturers from the University of Silesia. On the second day of the festival band Percival performed. Their music had been used as soundtrack for The Witcher 3: Wild Hunt game. The concert took place in the Sports and Performance hall and was attended by a large audience of the computer games music fans.

Persival 2017

From 2017 the concerts took part at the Main Market Square in Cieszyn. On the first day the audience listened to the SALK music band playing live the soundtrack for the Nosferatu silent film from 1922. On the second day Percival music band played again. The concert by Harmonia, the Representative Choir of the University of Silesia and The Representative Orchestra of the Border Guard attracted a large audience.

In the following years students from the Design of Games and Virtual Space, specialization Sound in Games, played music on stage. The students prepared their repertoire during the classes throughout the academic year.

In 2018 two student bands, Game Annihilators and Company of Crisis. conducted by Kuba Chojnacki, performed during the festival. The bands played several famous computer games themes which had been prepared during classes. They also played the themes from GTA, The Sims, Skyrim, Layers of Rear, Tetris and other games. This year, during the LAG Music the "Impruś Mamlaga" performance was staged by the Student Science Circle. The students performed a skit with the subject related to the LAG festival.

During the last edition of the festival in 2019 the participants had the chance to listen to four concerts taking place in two evenings. On June 4 and 5 at the Main Market Square concerts by the students and employees from Unthe Institute of Music of the University of Silesia were played. The student music bands Game Annihilators and Company of Crisis played again. Their music can be heard on the albums released in 2019. Moreover, the audience listened to music played by the bands formed especially for the festival by the academics from the Institute of Music and other musicians, especially invited for this occasion. On June 4 band Game Jam played. They presented the well-known computer games themes in their own arrangements. On the hot June evening the public could enjoy the musical motifs from Morrowind, Mafia Theme, Fallout 2, My Crysalis Highwayman, Witcher in the jazz arrangements. The band was composed of Paulina Bielesz- transverse flute, Kuba Chojnacki – saxophone, Krzysztof Gawlas – guitar, Filip Miguła - piano, Dawid Opaliński – percussion, Bartek Chojnacki – double bass.

On the following day another band, Free Flow Electric played a concert. The band was composed of: Marcin Żupański – saxophone, flute, Robert Szewczuk– base, Piotr Matusik – piano and Jan Pieniążek – percussion. Apart from the band's own compositions various interpretations of popular computer games musical themes were presented.

Band *Game Annihilators* 2017

Kuba Chojnacki
University of Silesia in Katowice, Poland

Student music bands

The idea of establishing a musical group made up of students majoring in Sound in Video Games was born in 2016 during a class in our Artistic Studio. The class was supposed to guarantee that students remain in touch with traditional instruments and life music making.

In the era of digitization, which is omnipresent in music production, many limitations which used to accompany musicians and producers have disappeared. It is now very easy to even out the shortcomings and hide the lack of performing skills. It is, no doubt, a step in the right direction, but nevertheless, it entails the risk of neglecting the need to develop basic musical skills. Sometimes students jump into the conclusion that they do not need to know the rules of harmonics or rhythm because even without that it is "still possible to make music". After all, there are harmonizers and quantizers which can create the lacking consonance and balance the rhythm. Unfortunately, such reasoning invariably leads to a dramatic reduction of a person's own creative output, since the whole artistic potential is at the mercy of software, not one's own creativity. In the long term, it is related to a change in the working methods. A creative artist becomes someone who resembles a computer programmer. It is of course just another way of working, but I do not think it should be the dominant way at an artistic faculty.

Band *Company of Crisis* 2019

Band *Game Jam 2019*

When a student works on a musical arrangement, he or she needs to acquire basic knowledge which is required for the orchestration for a given cast. Any errors are quickly spotted by individual performers, so the arranger has immediate feedback stating what should be improved for the piece to sound better. When individual members of a musical group perform their parts, they can listen to how they sound in the background of the other instruments. It is a great exercise which develops analytical thinking in music.

Another equally important aspect of working with a musical group is the sheer pleasure of playing together. This pleasure is far greater than just listening to music and it cannot be experienced in any other way. Moreover, there is also the possibility of performing improvised solo parts and presenting them to the wider public.

During the three years of our working with students, we managed to establish two musical groups made up of several members: Game Annihilators and Company of Crisis. They successfully performed at the LAG Festival, where they presented their own arrangements of musical themes from well-known video games. In 2019, the University of Silesia published a CD with their creative output. Students are happy to get involved in the practice and create new compositions, which allows us to look at the development of this project with optimism.

Krzysztof Gawlas
University of Silesia in Katowice, Poland

Mobileorc

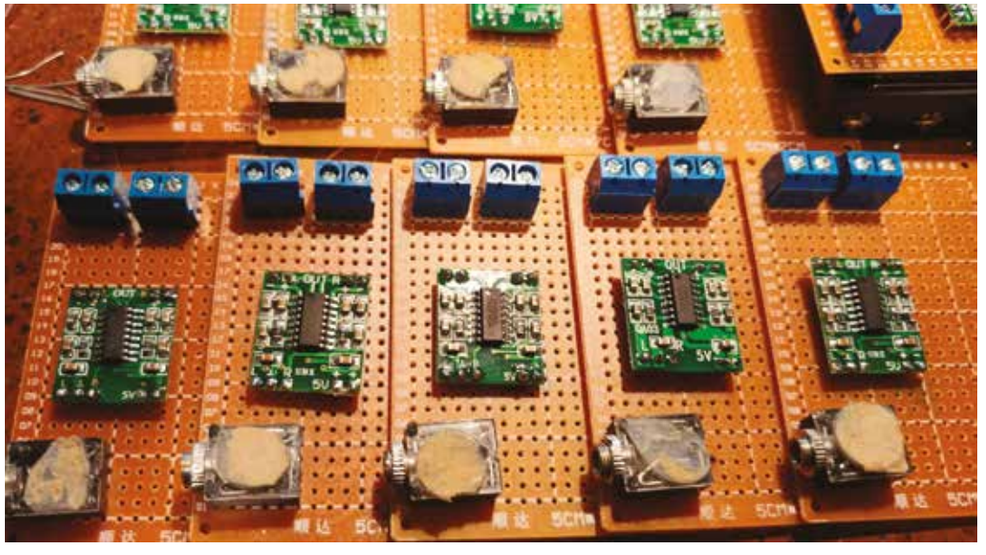
One of the music groups we could listen to during the 2016 LAG Summer Academy of Games was Mobileorc mobile orchestra. During its evening concert at the Cieszyn Brewery, the group performed In C, a composition by Terry Riley, an American composer and co-creator of the Minimal Music genre.

Mobileorc mobile orchestra was founded in 2015 during classes for students of Game and Virtual Space Design, who majored in Sound in Games.

The members of the orchestra develop software instruments for mobile devices (smartphones, tablets, laptops) using pd and MobMuPlat programs. Every performer has their own set of stereo speakers and an amplifier, which they built by themselves using PVC pipes and car speakers. This "personal" sound system makes it possible for virtual instruments to emit sound in a way which resembles acoustic instruments. The orchestra involves multiple sound sources positioned on the stage, similarly to the traditional orchestra.

Terry Riley's piece In C was composed in 1964 for an indefinite cast and number of performers. It is made up of 53 short alternating fragments. Each of them should be repeated multiple times. Every performer chooses the number of repetitions at their own discretion. The fragments need to be played in the sequence determined by the composer. The duration was determined by the composer as varying from 45 to 90 minutes. The performers use several different synthesizers, programmed as a smartphone or tablet application. By using virtual slides, knobs and buttons or just changing the position of the phone tilting it left or right, up or down, the performer influences the parameters of sound synthesis and can expressively change the tone and dynamics of the sound. At the concert that took place during the LAG festival, the group was joined by musicians playing acoustic instruments, expanding the sound palette. Mobileorc is an example of a non-standardized educational undertaking. Students get to know the secrets of sound synthesis by programming instruments in puredata (pd), a visual programming language. They learn the basics of audio equipment control and practice soldering when they construct amplifiers and speaker sets. They get to know the repertoire of electroacoustic music and try their hand at composing by writing musical pieces for the group, often following the analysis of compositions created by masters of this genre. Finally, they can experience performing on stage, present their own instrumental parts, listen to others and create an atmosphere which impacts the audience.

In 2018, Audiomat, a music publishing company, released a CD with In C performed by Mobileorc. In the same year, the group performed at the Audio Art festival in Kraków.



Electronics of the loudspeaker system in the works

Loudspeaker enclosures for the mobile phone orchestra

Karol Pyka
University of Silesia in Katowice, Poland

Game music interpreted by a brass band

On 2 July 2016, Cieszyn Castle Brewery hosted the first LAG Music concert, which was a part of the Festival of Art and Independent Games organized by the University of Silesia, the University of Ostrava and the University of Ss. Cyril and Methodius in Trnava. It featured the University of Silesia Cieszyn Brass Band, conducted by the author of this article. Its repertoire was based on music from popular video games.

This orchestra is an educational group whose members are students of the Faculty of Fine Arts and Music at the University of Silesia in Cieszyn. The group has 30 years of tradition and has been awarded at international brass band festivals. Its repertoire includes popular marches, classical music, film music and popular music.

During the concert, the audience could hear: "The Sims – Makin' Magic" prepared by K. Gawlas, "The Witcher 3 - Main Theme" prepared by K. Pyka and "Super Mario Bros" prepared by N. Iwai. The first two pieces were arranged and prepared with this specific event in mind. The performance of University of Silesia Cieszyn Brass Band lasted 15 minutes. The musicians presented popular tunes from game soundtracks arranged especially for this instrumental ensemble. Special recognition is due for the interpretation of music composed by Koji Kondo for Super Mario Bros. This musical arrangement included not only the main themes from the game in an extremely interesting orchestration, but also the characteristic sound effects which you can hear when you play the game. A brass band is a music organism which, thanks to its rich array of instruments, can attractively convey multiple sound phenomena which are featured in both film and video game music. What is more, the brass band is an instrumental ensemble which enjoys popularity both within the music community and among wider public. Thanks to its rich sound capabilities, it can perform diverse types of music, including soundtracks from popular games.

Soundtracks from video games are a rich depository of interesting musical themes and orchestrations, which are strictly related to the mood and the pace of action in the game. Such pieces are also universally associated with the titles of games which they represent. The possibility of interpreting these compositions, especially arranged for a brass band, is an interesting element of working with a student brass band and contributes to promoting this kind of art among wider public.

The Representative Orchestra of the Border Guard and the *Harmonia* Choir of the University of Silesia

Band *Game Jam* 2019

LAG Festival 2019 – *HONORABLE MENTION of the Poster Competition*
Kinga Makowska, PL

events

LAG TECH

LAG TECH is an event aiming at extending the cooperation between the academic circles and the video game industry. The representatives of the video games companies presented their latest productions, observed the students' projects, participated in the event as members of the jury and as experts. Students had the opportunity to establish contacts with the specialists from the video game industry and business. The LAG Tech project was visited by many representatives of the computer game industry, from Poland, the Czech Republic and Slovakia. The event hosted representatives of such companies as: Techland,
Hangar 13, Bartos Studio, Carbo Studio, Studio Division 48, VividGames, QQ Studio, Amanita Studio, Incuvo, The Farm 51, CraneBalls Studio, IMGN.PRO, Sleepless Clinic, Kinguin and many more.

LAG Tech 2017

SleeplessClinic

Sleepless Clinic is a Polish Indie studio from Bielsko-Biala. Our team consists of seven extremely creative people who never slept... but were making games. We share a passion for creating new exciting games and playing them after hours, so our job is also our hobby.

TECHLAND®

Since the company's foundation in 1991, Techland has been consistently reinforcing its position in the industry and in 2000 began to conquer international markets.

Fool's Theory

We are a company of AAA veterans who decided to take a break from huge productions and find refuge in the mountains of southern Poland.

carbon studio

Carbon Studio is an independent studio creating videogames and apps for PC and mobile platforms, exploring the possibilities of Virtual Reality technology.

THE FARM 51

The Farm 51 is a team of enthusiasts. We develop computer games and virtual reality applications, and contribute to the dynamic growth of the new technologies market. original stories.

HANGAR 13

Hangar 13 is the internal 2K development studio behind the award-winning Mafia III. We are comprised of a diverse group of people, from industry veterans with experience working on big franchises, to talented former indie entrepreneurs and recent graduates.

LAG Tech 2016

TECHMO Voice Technologies 2017

The Ostrava game studio was established in 2009 as the brainchild of three friends who were bored of working for an advertising agency. One thing they never got bored of, however, was games, so they started making them.

Amazing 2D and 3D games made on Unity Engine.

Studio from Ostrava producing programs for Czech television, spots and commercials, co-productions of feature films.

Hangar 13 2018

Coal Power Games 2019

LAG Tech 2019

LAG con

LAG Con is a two-day convention of fans of games and fantasy. There will be something for amateurs of video and board games, games of imagination, literature and film. During this meeting you can encounter interesting guests, listen to lectures on topics related to fantasy and take part in workshops and tournaments. The convention is an opportunity to meet people interested in games, as well as to get to know the latest games and strengthen networks in the field of gaming. The event takes place in Cieszyn. Admission to the convention is free.

LAG Con 2018

LAG Con 2018

other

E-sport

Presentation of the F.W. Murnau *Nosferatu* film with music played live

Car painting 2017

The Food Flavours Market, Food Trucks Festival 2017

Sculpture workshops 2018

The student theatre 2018

ZaGra Graphics – an exhibition of graphics, Cieszyn Castle 2016

Justyna Stefańczyk
University of Silesia in Katowice, Poland

Graduated from the Academy of Fine Arts in Katowice in 2000. Received a diploma, with distinction, from the Faculty of Graphic Design, supervised by professor Marian Oslislo. A recipient of the Erasmus scholarship, studied at Utrecht School of the Arts in Holland, majoring in illustration. In 2018 received a PhD degree under the academic supervision of prof. Aleksander Ostrowski at the University of Silesia in Katowice, Arts Department in Cieszyn, the Faculty of Graphic Design. Presently working at the University of Silesia Arts Department in Cieszyn, the Faculty of Video Games and Virtual Space Design.

Illustrates poetry and creates picture books for children. Also interested in poster art, typography and animation. Skilled in workshop graphics and painting. Participated in multiple individual and collective exhibitions, national and international, among others in Holland, Germany, Japan, Czech Republic, Ecuador, Mexico, United Kingdom, United States and Ukraine.

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